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Sorgo Department.

The Rural World is the only journal in the United States having a special department devoted to sorgho and sugar making from sorgho.

Letter from S. F. Wyman of Minnesota.

COL. COLMAN: Seeing an invitation extended for the sorgho growers to report progress and no one inclined to respond in these northern regions, I will say that I never saw a better prospect for a crop than at present. Cane and corn are just booming. I have not, like many others around here, a very good stand of the Amber, but my Orange is very nice. I have sown 2½ acres of Orange. It is now nearly 7 feet high. The seed head is just ready to shoot up, "how is that for high" away up in this northern country?

Wheat harvest has just commenced. Yield rather below the average in this the southern part of the State. Chinch bugs in some places are bad. Oats heavy. All kinds of vegetables extra fine. We are having it very warm and wet now, which makes bad harvesting. I learn that Bro. S. H. Kenny, of Morris-town, is going to get a new Victor mill this season. I do hope he will not be so unfortunate with this mill as he was with his old one, for I know of nothing that is so trying as it is to have a broken mill right in the busy time of syrup making; but then it doesn't make so much difference if one has good backers that will make good all losses. My flexible mill has not failed in any particular yet—comes right to time every time.

S. F. WYMAN.
Waseca, Minn., July 25th, 1881.
P. S. I think I shall join the grange (cane) men after this year stronger than ever.

Letter from North Carolina.

COL. COLMAN: I will give you a few items concerning the crops away here in the "old North State." Corn and cotton are looking finely. The wheat crop is an average for this country; about eleven bushels per acre. There are a few farmers in this county experimenting with sugar cane. I suppose there are twenty-five or thirty acres planted in this county, and there have been four or five one-horse cane mills and evaporators bought to work up this crop with.

Cane is looking well, where it is not too thick. I am experimenting with Early Amber, Early Orange and Liberator. My Early Amber is now headed out, and will do to work up in twenty days. My Early Orange is looking finely—the best cane I have seen—but I think it will be as late as the Liberator. I like it better, so far, than any variety I have seen; it is very vigorous in growth, and I think it is better suited to this climate than any other.

It is currently reported here that the suckers and young cane will kill cattle, horses and even geese. Do you, or any of your readers, know of any cases where cattle or horses have been killed by eating it? What proportions of lime and water constitutes "milk of lime"?

By answering the above questions through the columns of your valuable paper, you will greatly oblige.

N. A. LAYTON.

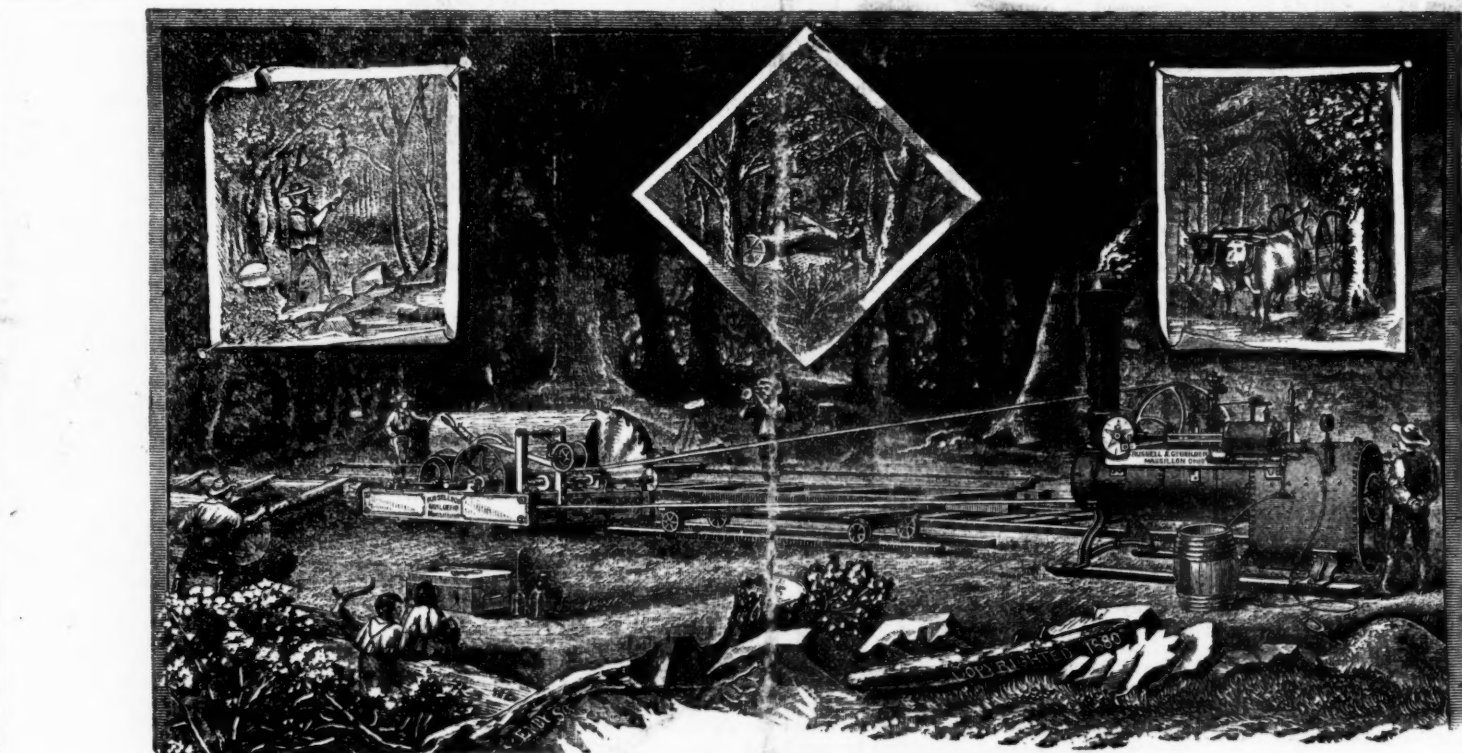
Giles Mills, Sampson Co., N. C.
REMARKS.—It is all a mistake about the suckers killing stock. They are as good food for all kinds of stock, as corn-stalks whether green or dry. Many southern planters raise sorgho, suckers and all, as food for their mules and horses and feed it green and dry with the best results.

Letter from New Orleans.

COL. COLMAN: Please find here enclosed \$1, amount of my subscription to the RURAL WORLD, ordered some time ago by my friend Mr. L. A. Rous-sel of Louisiana. I am well pleased with the RURAL WORLD, and am much interested in all I see in it concerning the production of sugar from sorghum.

As one of the principal sugar makers, sugar boilers and sugar refiners in Louisiana, I must say that I agree entirely with the sentiments expressed in your editorial in the last issue (July 21st) of your interesting journal, viz: that the sugar planters south and west "should work hand in hand, and side by side." I will say besides that if parties interested in the manufacture of sugar from sorghum in the west, think they can make it an object for me to go west, in August and September, I would willingly make the trip and visit some of the largest refineries, and assist in developing this much desired staple.

During our last grinding season, I handled, with the assistance of my two sons, over 5,000,000 pounds of sugar in



RUSSELL & CO'S "MASILLON" PONY SAW MILL.

The pretty scene presented herewith represents the manufacturing of lumber in the woods, avoiding the labor of hauling logs long distances to saw mills, which improvement has been rendered practicable by

the parish of St. Mary, La. And this year for the coming crop, we have charge of four of the largest sugar crops in the State, which will turn out, I presume, not less than 7,000,000 pounds of sugar and about 5,000 barrels of molasses.

The places we have engaged to superintend this coming season are the following: Steele & Clarke (Lagonda Plantation), Capt. J. N. Pharr (Glen-wild and Fairview), Chas. H. Walker (Bellevue and Palo Alto), Pharr & Bussey (front and back place), Pharr & Oliver (front and back place).

All of the above parties reside in the parish of St. Mary, La.; and information concerning my abilities, can be obtained through these gentlemen.

Please write me your views on my proposition. My address is:
E. C. BARTHELEMY,
Coliseum, corner of Valence,
July 28, '81. New Orleans, La.

Germination of Seed.

MR. L. A. HEDGES: I see in the RURAL over your signature the heading "Cane Seed a Failure" and your reasons for the same and in them some good suggestions. Now I give the following reasons: I am no sorghum raiser, nor do I pretend to say why your seed did not germinate. But I am a cane raiser, and why the same seed will germinate under certain circumstances and not under others—I find that if the weather is not too warm and wet so as to rot that portion of the berry, which, I suppose by nature, is to support their germ until it has served its purpose and then the natural elements for the plant serves for the balance. I find in planting the same kind of seed in the same kind of land and under different circumstances (or temperature rather) that the seed is either good or bad and I attribute it to other causes than the seed. If you have any reasons why my ideas are not correct, please say so through the RURAL.

DR. J. T. MATESON.

Louisiana, Mo.

Manufacturing Sugar from Sorghum.

The buildings of Messrs. Jno. Hilgerth's Sons at Rio Grande, Cape May county—erected for the purpose of experimenting in the manufacturing of sugar from the sorghum cane—are rapidly approaching completion. The main building which is 46 feet by 70 feet with a four-story front, is now being covered in, as is also the two-story boiler house 40 feet by 45 feet in size. An engine room 20 feet by 25 feet, will about complete the group. About 800 acres of the cane have been planted in the locality. Farmers paid \$2 per ton for the cane, delivered at the nearest railroad station, and the State pays another dollar per ton to the grower for all he delivers to the manufacturer. In addition to these incentives to cultivate the cane, the Messrs. Hilgerth's offer a premium of \$150 for the best ten acres, \$100 for the second best ten acres, and \$50 for the best five acres. Properly cultivated, the yield per acre should be between eight and ten tons. It is claimed that this will be the first establishment of this kind in the United States where the vacuum pan is used.—Philadelphia Ledger.

COL. COLMAN: The above shows that the east is doing something in the sorghum line. His claim that they will have the first vacuum pan used in this business is slightly incorrect, as the west has eight establishments equipped with the vacuum pans.
Chicago, Ill. F. A. WARDNER & Co.

the invention of the Pony Saw Mill. These mills have within the past few years become very popular, as the business has proved itself very profitable, the capacity being from 3,000 to 7,500 feet of lumber per day. The demand for Pony Saw Mill outfits has been

very gratifying to their manufacturers, the well known firm of Russell & Co., Masillon, Ohio. This firm was established in 1842, and since that time have founded an enviable reputation as manufacturers of threshing machines and portable farm engines. Their

shops cover acres of ground, and their business the length and breadth of the country. Their catalogue is handsome and interesting, and should be in the hands of would-be purchasers of such implements as they make. It is sent free to interested applicants.

Mr. Thoms to the Minnesota Cane Growers.

The following is Mr. Thoms' letter to the cane growers of Minnesota:
To the President and Members of the Minnesota Amber Cane Association:
Although a stranger to you all, except your worthy president, I take great interest in your endeavors, and would be with you on the day of your meeting if business would permit, so the next best thing I can do is to send you my greeting. Two years ago I came to Crystal Lake to see sorghum for the first time in my life. *Vent, videt, vici.* I was thoroughly convinced before arriving here that sirup from sorghum cane would not crystallize. On my arrival at Crystal Lake I was informed a compound had been invented that, if not used in the sirup, crystallizable sugar could not be obtained. Fortunately the inventor of the so-called compound was at hand, and I informed him that if sugar could not be crystallized without this patent agent, it could not be done with it, and that my first efforts would be to avoid using it, as eight years before I had used and abandoned the very article. We temporarily rigged up a vacuum pan, with instead of boiling a pan in three or four hours, took from 1 p. m. till 3 a. m., to boil only half a panful—and instead of boiling the sugar at a temperature of 140 degrees Fahr., it would reach as high as 195 degrees. Now this usage was sufficient to destroy the best of sugar—the result with us, it made a yellow sugar, and fine grain. But it proved to me that the cane contained sugar, and in paying quantities. I defeated my own policy my own way, reducing it to sirup, which I think we kept three or four weeks before the vacuum pan was ready, and without a single soul who had ever worked five minutes at a vacuum pan, to assist me, I reduced it to sugar, run it in the granulating tanks, went home to take a nap, returned and found a solid, hard mass of sugar, and could have commenced separating the sugar from the sirup that afternoon. That settled the whole business in my mind. Gen. Le Duc visited the works; we sent a man, weighing about 195 pounds, with a spade and told him to push it through the sugar to the bottom of the tank, which he could barely do. That sight made the General happy. If I had had a good second to assist me, our results would have been better. I will here state that the latter part of our sirup received some of the patent medicine. I boiled it as I did the first pans; in fact, it received better treatment in the vacuum pan. This, after it was boiled to sugar density, owing to an accident to the machinery, was kept till last summer—nearly a year—and had not then crystallized within two thirds as much as that which contained no compound. As we run night and day it was impossible for me to supervise the making of all the sirup, for it is a business, I assure you, that cannot be learned in a week, and you gentlemen will no doubt bear me out in the assertion. My advice to new beginners would be to use no patent medicines, either for your stomachs or sugar. A sugar refiner of many years' experience knows enough to avoid the use of drugs, unless he is familiar with the process. Should you use too much of certain compounds it will make a brilliant sirup, but in a few weeks it will be as black as an old hat. There is no man living who can tell you how much lime to use to make a defecation; for should the juice be thin, and kept any length of time, either in the cane after it has been cut or when the juice is pressed from it, the quantity

of lime required will vary, according to the density of juice and its age. So, you will see how impossible it is for me to answer the question, how can we defecate the juice? Do not take any stock in patents, for let me tell you, there are sugar refiners in the east and in the south who are ready to pay \$100,000 to any who will impart to them a secret that will enhance the value of their sugar one-eighth of a cent per pound, and get the same yield. This is the last place among the sorgho sirup and sugar manufacturers, therefore, to introduce so costly a secret. And, if you will permit me to observe here, do not expect to learn this business with two or three weeks' experience, for any man of ordinary intelligence knows it cannot be done. You must watch the juice while being reduced to sirup or sugar and learn its nature, just as you would the different soils to produce different crops. Each day will develop some change in your sirup, which in all probability is caused by the state of your cane when ground or in the quantity of lime you may use, or the temperature of the heat applied to your pans. Be watchful, and adopt the plan that produces the best results. My experience for 1880 is as follows: We contracted for about 250 acres of cane at Crystal Lake. We were visited with a hurricane about a month before the cane was ripe, which leveled it with the ground, never to rise again, and out of the acreage we contracted for, we received the product of about thirty-two acres, besides having to wait one month before receiving the rest. Yet with all this, we made some money. We also made sugar. The juice of this year's cane, at Crystal Lake, was not near as strong as the previous year. This I understand to be the experience of all in the north-west. Our venture at Larned, Kansas, was as follows: Our machinery was to be up and in place by the 1st of August, but we did not receive portions of it until October. Found the juice very strong in sugar. Two days after we commenced operations there, a heavy freeze came, putting a stop to our sugar-making, as we were not provided with any room that could be kept warm, hence had to make sirup, which I continued to do until November 18. The highest price we got for our sirup was fifty cents per gallon, and the lowest was forty-one cents by the car load. I have told you what we sold it for—I now tell you what it cost us, including cars, barrels and wages—we use no other fuel than bagasse. The total cost was fourteen cents per gallon. The indomitable worker for the good of sorghum, L. A. Hedges, Esq., visited our works, taking a sample of our sirup with him, and as I am a modest man, I will leave your president to state to you what he said of it at the St. Louis convention. Our sirup had no glucose in it—to lighten it in color—as Mr. Hedges took it to a merchant who tested it. I have located in the west and am bound to fight this thing out, and if at any time I can be of any service to you, command and I will obey.

JOHN B. THOMS.
P. S.—We do not strip our cane; found it was not necessary.
MINNESOTA AMBER CANE GROWERS' ASSOCIATION.
[Reported for the Commissioner of Agriculture, by his stenographer, Mr. LeDow, and furnished the RURAL WORLD at the request of the Minnesota Amber Cane Growers' Association.]
Mr. Wyman: This is a very important subject and should be thoroughly discussed, especially as the proceedings of the conven-

tion are going to be published. I endorse what the last gentleman (Mr. Wood) says. What will do for large mills will not do for small ones, and as yet there are in this State more small than large ones. I stated last year at this convention that I did not believe in grinding leaves. I say it here to-day, and I believe we should make the distinction between large and small mills and let it be known to the people at large that there is a difference between them. I think our friend Col. Colman will agree with me that it is not to our advantage to grind with the leaves on with 2-horse mills. I have had experience in that and I have made a rule not to grind any cane for my customers that has them on unless they pay me extra. There is no sap in the leaves and the work is very perplexing to the feeder and unless you have one who will keep his mouth shut and who is not in the habit of using crooked language, you will be bothered considerably. Don't let us establish any rule to day that is going to prove detrimental to the many poor men who are not with us but who will see and read our proceedings. They will see that Col. Colman, who has had several years' experience, advocates grinding with the leaves on. If some of them should follow his idea, I fear they would accuse him as they did our friend Miller a few years ago. I don't know that they exactly accused him of anything, but they found his methods were not best for them. A good man can strip an acre a day, and we will call the labor \$1.25 in our section of the country. I advocate and believe it is worth one-third more to grind without the leaves on, and I don't want the impression to be given out that it is just as well to grind with the leaves on.

Mr. Dickerson: I happen to be one of the wigglers among the bigger fish. A year ago Mr. Miller told me he run it through his mill with the leaves on. He has a number 5, Victor mill. He said that his boy said it was easier work to feed with the leaves on than without. I went to see my neighbors and friends who were to "put in" the cane, and told them what Mr. Miller said, and told them at the same time that my choice was to have the leaves off. I never had fed any. Everyone, with one exception, stripped his cane. This one told me that the wind had raised hob with his crop and he could not strip it at all, and he would have to bring it without stripping. I told him to bring it along and I would do the best I could. Well, it took, to work that up, not less than one fourth more labor for my team and it was as much as my men could do to keep up juice enough for my evaporator. This was last year. The past season I told my customers if they wanted their cane worked up they must take the leaves off. For us wigglers I think it best to grind without, but for the large fish, those that have larger mills and greater facilities it may be different. I find the stalks of the bagasse are good for cattle if the cane is not crushed dry. If it is they will go to a pile of chips to eat as readily as to the bagasse pile, but if the leaves are left on they will take their share.

The President: Does Mr. Wood's motion meet with a second?

Mr. Day: I wish to give a little of my experience this past season. There were one or two who brought cane to my mill without stripping it. There was one man in particular, by the name of Jenkins, who said he was at the horticultural meeting a year ago where some one had recommended grinding without stripping. He had cut his crop without stripping. This cane was so mouldy that the dust would rise all over my mill. I had to stop my evaporator in order to grind that cane. It produced a sirup of very dark color and inferior taste, and it was not worth half price. He got his information from this society, and I would like to have it understood now that those of us who have small mills cannot do as good work or as much of it with unstripped as with stripped cane, and the cane will not be as good, but I will say this, however, if you want to feed your cat-

tle with the bagasse it is a first-rate plan to leave it.

Mr. Powell: It is very objectionable for me to rise and call my own name, and for that reason I haven't risen before. I find it is very important that we should be correctly reported, and at St. Louis I was not correctly reported in what I said in reference to working cane without stripping. I have had a little experience in this matter. I have had 20 acres of my own raising which was planted very late. It was planted or rather sown with a seed drill, by taking out all but two of the rows, which left them fully 3½ feet apart. I put on about four pounds of seed to the acres as near as I could estimate. Of course you know it was very thick and it would be an endless job to strip it so we run it through without. At first the boys thought we could not get it through and I discharged some of my hands who were running the evaporator, thinking we would have to run the mill 24 hours and evaporator 16. But we found after awhile we had to get more men to keep the evaporator running all the while; though I am not going to advocate entirely that as method by any means, and I might say that there might in my opinion be great loss in so doing. The first that we worked in that way we could not see that there was any difference in its flavor, and the flavor of that from the stripped, but soon after commencing there came a snow or rather a heavy rain which wet the piles, and from that time there was a flavor to the sirup caused by the leaves being wet, and I don't believe it can ever be corrected. Now if we should practice this, there might be hundreds of tons of cane around our mills exposed to the storms and it would be damaged and it seems to me there would be a great risk. Perhaps it may be out of order but if you will excuse me I should like to refer to what has been said about the "Stewart Process," growing out of a letter which my partner (Mr. Wilcox) has read from Prof. Stewart. It seems to me, Mr. President, that there is a good deal of prejudice in regard to this process, although I am not going to advocate it as the best plan. We have never used any other process and the stock worked is still in hand. Now, I have confidence in my business, and I have never thought that I had a bad article or that it was necessary to rush it upon the market. I thought I would give it a chance and give it time and I say to you that my sirup is no worse than you can't drive a scowp shovel into it. Now, gentlemen, I believe that sugar and I am going to have confidence in it until warm weather, and then we will show you large quantities of it. I tell you we did well to do what a great many of those present did not do. At any rate we have all this in tanks and as soon as warm weather comes, I believe I have it so it can be handled; we will see.

Major McDowell: I don't know of any person or any class of people so much interested in this question of stripping cane as the large manufacturer who has a mill capable of working more than he has, as was the case at my factory. I started out contracting for 150 acres to be grown. As that fell short, either from want of seed or want of knowledge or confidence, I found my crop of 150 acres dwindling away rapidly, and I rented a farm and put in 80 acres myself. My contracts with the farmers were to the effect that they were to bring me to the mill, the cane in proper condition, put in bundles and stripped, and free from weeds or anything else. Some of them had their idea of doing it and others thought they had, and you would have been astonished to have seen the variety of bundles they brought and the quantity of grass some of them contained, to say nothing of the roots they used for tying it and the dirt there was in them. I broke down and fields of cane stood there, and the question was, should we strip. We drew it in unstripped and tried different experiments. I don't know how much it cost. One gentleman here has said that a man could strip an acre a day and that it cost \$1.50. I would have it done if it cost 3 times that. When you grind you want to grind pure cane, and not leaves, and seed, and trash of all sorts, for it makes all the difference in the world when you come to evaporate, whether there is impurities in the juice. In the 80 acres that I planted, the frost had nipped the leaves, and we ground that with any perceptible inconvenience at all; so there is a time when you can handle the cane with the leaves on, and that is when they have been bitten by frost; but if you take fresh cane and run it through the mill with the leaves on it will destroy a great deal of the value of that juice for sirup or for sugar. I am quite anxious that this Convention should adopt some rule in regard to this.

[TO BE CONTINUED.]

A Georgia negro who has returned to this country, after ten years' absence in Liberia, says that the climate is very warm there, with no difference summer and winter. The people live mainly on fruit and a root resembling the sweet potato called *canadans*. The crops are never harvested, but are taken from the ground as they are wanted. Coffee and ginger are the only money-producing crops. Plows are not used in cultivation. The cotton plant grows to the size of a tree and produces an annual crop of cotton. The narrator says that nearly all the negroes who have gone there from the United States would return if they had money to come with, but why he does not say.

The botanist saves fresh leaves and flowers by pressing them between folds of spongy paper. The farmer may take a hint from this. If he puts up his clover with alternate layers of dry straw or last year's hay, he may save it quite fresh and at the same time greatly improve his old hay, or render his straw quite palatable to the cattle next winter.

The Grange.

[The Rural World welcomes to the Grange Department communications from Missouri and all parts of the Mississippi Valley from members of the order. Brief notes of what is going on in the order, or any matters pertaining to it will be cheerfully published.]

Official Grange Paper.

At a meeting of the executive committee of the Missouri State Grange, held in the city of St. Louis on the 3d day of December, 1880—all the members being present—it was agreed to accept the proposition, submitted by Col. Norman J. Colman, for publishing the official Grange communications in the RURAL WORLD during the two ensuing years.

A. M. COPPEY,
Secretary of Executive Committee.
Knob Noster, Mo., December 6, 1880.

Rolla State Grange Resolutions.

The Missouri State Grange, at its late session at Rolla, unanimously adopted the following:

Whereas, COLMAN'S RURAL WORLD was one of the first papers in Missouri to espouse the Grange cause, and to urge the farmers of the State to organize themselves into granges; and

Whereas, It has ever been the faithful, earnest and consistent friend of the Grange and of the agricultural classes of the State, zealously laboring to advance every agricultural interest and to elevate the profession of agriculture to a higher standard; therefore, be it

Resolved, That the Missouri State Grange cordially indorses COLMAN'S RURAL WORLD and recommends it to the support of the Patrons of Husbandry of the State of Missouri.

The Grange and the Anti-Monopoly League.

The credit of calling the attention of the public to the gross abuses of railway monopolies belongs to the farmers of this country, who through their organization known as the Grange, were the first to make an open attack upon the iniquitous discriminations and unjust burdens imposed by the railway kings.

It was asserted in the very beginning that they were not enemies to railroads, or to capital, but that they were for justice and fair play. So far from receiving any aid or encouragement from manufacturers or those engaged in commercial pursuits, they were left to carry on the fight single handed, and were most roundly abused by the press, vilified by the trade, and in some instances ridiculed from the pulpit.

Conscious, however, of the justice and integrity of their cause, they went boldly forward and for years warned the people against the danger which threatened them.

At length the boards of trade saw the danger too, and they formed associations to defend themselves from the fate which had been said would surely be meted out to them. Anti-Monopoly leagues were formed, and the efficient aid of able and wise men has been enlisted. Not, however, until the farmers had to a certain degree effected great things for themselves and the country at large. Not until the celebrated Grange cases had been acted upon by the supreme court of the United States, and decided in favor of the people and against the railroads. Now since that decision has been promulgated, the efforts have been made by the railroads to get possession of the courts, as they already had the possession of the Congress of the United States.

The great issue before the American people to-day is that of monopoly. It is no longer a question confined to the farmers of the country or their organization, the Grange. It must in the future be one in the politics of the country.

If it shall be made a party question the farmers will not be to blame for it, and it will be incumbent upon them to stand by the principles which they have time and again enunciated, and are part and parcel of their organization.

Below will be found a communication which we clip from the New York Sun, which bears immediately on the question under consideration, and will repay perusal:

It is probable that the Anti-Monopoly League, whose branches are being rapidly formed in New York, New Jersey and elsewhere, will be powerfully aided in this work by the Patrons of Husbandry. That order has recently attracted less attention than its members and earnestness deserved. But far from being moribund, it is stronger to-day than at any time since its institution, and its affairs are managed upon a better system and with more intelligence than heretofore. Early mistakes have been repaired, the machine of business between the Grange and the outside world has been perfected, and true and trained men have come into the lead.

"Two leading causes have operated, it appears to us, to retard the growth of the order and limit its usefulness. The rude, ill-considered attacks upon the railroads in the Western Legislatures, while not really the work of the Grangers, were universally attributed to them, and were supposed to be a fair measure of their political capacity, and a just exposition of their political principles. But this was not true in point of fact. The legislation which failed so signally was not devised in the Granges or by their authority. That a majority of the members were in favor of it there can be no doubt. But it was brought forward in its crude form and hastily enacted by a class of demagogues who were, in most instances, not only not Patrons, but were ineligible for membership. They seized the opportunity to make fair weather with the farmers, and in their zeal to serve their own political purposes well-nigh ruined the movement, upon which they had laid hold as mere makeweight to their own. But the order itself is not political; it does not nominate candidates for office, and it does not, and constitutionally it cannot, lend its organization to partisan uses.

Again: The Grange spreads very rapidly in nearly all the Eastern States during the first year or two of its existence, when there is not only a sudden cessation of growth, but a great falling

off of the original membership. Here, too, the politicians of a low grade endeavored to creep into the subordinate Granges and pervert them to political purposes. But they made no headway, the farmers themselves perceiving that the immediate effect of the so-called "Granger legislation" was to force the railroads to give the Western farmer cheap through freights, and thus enable him to undersell Eastern competitors, they began to foresee for themselves the fate which has overtaken the British farmer from the same cause. Inasmuch as the preponderance in the Grange lay West, it was supposed that the national organization would be devoted to this work, and the grain of the West would be the ruin of the East. But this apprehension having no substantial foundation, has gradually given away, and it seems that the local and state organizations, while remarkably adapted, like the state governments after which they are fashioned, for domestic protection and the management of domestic concerns within their scope, are in no danger of being overborne in a wrong direction by the National Grange.

In the naked proposition that the state has the power to make just rates of carriage on the public highways, and ought to exercise it, the farmer of the East has precisely the same interest as the farmer of the West. But it is vital to him that the farmer of the West shall not receive a concession which is denied to him. He holds, and holds justly, that all changes shall be made in accordance with the cost of service, and upon this the Western Granger makes common cause with him.

Like the farmers' alliance in this state, which did much to sustain the agitation of public regulation, before the merchant of New York had taken a single step, farmers' Granges elsewhere are responding with great spirit to the appeals of the Anti-Monopoly League. In an official circular by Wm. H. Farquhar, lecturer of the State Grange of Maryland, extensive quotations are made from the publications of the League, and the five million of our farmers are urged in the strongest terms to combine with other interests, suffering in the same way, but not to the same extent. "The day," he says, "that shall see the farmers of the United States combined and held together by a hand so pure and strong as this (the Grange) will also witness the complete subjection of the tyrannical power of corporate monopoly. The mischief it has done and threatened will pass away and the good will remain."

Who Shall Govern?

The almost daily announcement of combinations among corporations and capitalists, reaching out in every direction to secure great gains and to control the course of National and State Legislation, is calculated to excite uneasiness among the producing classes, and suggests the question—is ours, in part, a government for the people and by the people, or one by the people, or one by corporations and millionaires?

One day we are startled by the news, that the great telegraph companies, under the manipulations of Vanderbilt and Gould, are consolidated with the addition of a few millions of watered stock, and will henceforth be operated and rates fixed as dictated by these great monopolists. Who will suffer? In the fore part of January, a New York paper stated that the report had recently been current that Jay Gould owned the New York Tribune, the World, and the Express, and was trying to buy another paper so as to control the associated press of the city that the report might be untrue, and yet that "he would be a cunning man who could ascertain what if any newspapers Mr. Gould owns, and what others he is buying." One sees clearly by that wealthy men are able to buy up the stock of the leading newspapers and to equip them so as to make competition impossible. It is also plain that the ownership can be denied or concealed. If wealthy individuals or corporations have selfish schemes and are unscrupulous as to methods, it is improbable that outside of New York, as well seek the aid, by purchase or subsidy, of influential papers, wherever they have such schemes to accomplish? Papers so controlled, professing to represent the interests of the people, are, in reality, the most dangerous foes of the public weal, and whether secretly owned or subsidized, the danger is equally great.

New Jersey has been looked upon for many years as greatly under the control of railroads, and the election of Governor in that State in November has been attributed by some to the vigorous and active efforts of the Pennsylvania road; and just after the election, a correspondent of the New York Times wrote, "a few days ago a prominent officer of the Pennsylvania road was running along the main line and all its numerous branches, on a special locomotive at all the shops, coal yards and docks, and other points where the road has men employed, and forthwith telegrams were received by members of the Republican State Committee, declaring that this man everywhere informed the employees, significantly, that the interests of the Pennsylvania road required the election of Mr. Ludlow," who was subsequently elected, as this correspondent thought, by the diversion of votes made by this active railroad officer.

The Legislature of New Jersey is Republican and says a correspondent of the same paper, "the laws of New Jersey require all railroad companies doing business in the State, to furnish the members of the Legislature with passes over their lines in the State. The custom is for the companies to send the papers to the Secretary of State, who sends them to the members. One company, however, this year, sent out its passes to the members direct, 'with compliments of,' one of its directors, who is one of the most respected men in the State, is mentioned as a candidate for the Senate."

And so it is, probably, all over the Union, and in Iowa as much as anywhere, that the large corporations, and especially railroad corporations, are actively alive to their own interests, both in the channels of trade and of legislation; in the former, perhaps, fixing rates according to what it will bear, and in the latter seeking such laws as will insure to their own benefit. While corporations are so alert in the prosecution of their own schemes, have farmers no interests that need protection? In England, we understand, that all rates must be public and uniform for like service, and must have approval of the Commissioners, who also exercise a general supervision, and act as a tribunal for the settlement of disputes from whose decision there is no appeal. Will it be us just here in Iowa to demand something of the spirit and vigor of such regulations, and instead of simply reporting railroad neglect

to the Legislature, have the Railroad Commissioners required to promptly enforce the law in the name of the State, by providing legal remedies. Where is the best place in which to test the opinion of the Commissioners upon the question of rates? In the Courts or the Legislature where the lobbies may be crowded with railroad emissaries? The floor of the House sprinkled over with railroad agents, and for aught we know, the Speaker's chair may be occupied by some one who may largely owe his position to interested corporation influence.

Grange Notes.

"Continue for another half century the power now exercised by corporations to tax the public, and we will have in this country a monied aristocracy such as the world has never seen, and with it all the attendant phenomena of venal legislation and corruption in high places such as has been the downfall of all the great republics of history."

A common carrier is a person who for a reasonable rate is obliged to carry any one who offers himself or his goods for carriage. The carrier asks an unreasonable price at his peril, for such demand makes him liable for damages as much as if he had capriciously refused to carry. What the charges shall be is a judicial question; but the legislature may, from time to time, provide rules of evidence and prescribe maximum rates for the guidance of the courts, and such legislation does not make a contract between the carrier and the State that the tariff shall not be changed.

The great questions now agitating the people are too important to be settled in a moment without thought. Quacks are numerous with remedies that are sure to cure in their estimation. People are beginning to fall into the error that any bill referring to the question will settle the whole matter. This is a grave mistake. The regulation of transportation rates, the restriction of corporate power, the control of the accumulation of immense amounts of property in a few hands are questions that need careful study and faithful effort to master. Demagogism is not wanted in this field.

The Grange is a very curious institution. Without being a peace society, it inculcates brotherly love; without being a temperance society, it demands sobriety; without being a loyal league, it teaches patriotism. It does not profess to be a religion, yet it requires faith in God. It passes over state and sectional lines and gathers its brethren in the mystic ties and holy rites of fraternal sympathy and love. It encourages the despondent and downcast to nurture a lively hope in God and mankind. It teaches its membership the grand doctrine of charity and it advocates fidelity in all temporal as well as spiritual duties and obligations. To be a good Patron of Husbandry a man or woman must be an upright citizen, a kind neighbor and a true friend. Can there be anything wrong in an institution that inculcates the valuable and ennobling lessons such as are taught in the Grange?—Farmer's Friend.

"That our order ever to disturb the relations between merchant, manufacturer and farmer we cannot for a moment suppose. Every farmer knows that he must devote himself to his own field of labor, but do not for a moment suppose that we consider his duty all performed, although he may have succeeded in coaxing from the soil its greatest yield of wealth. It is no less his duty to dispose of his products in the best manner possible, and lay out his surplus in the best manner possible. And after all this has been done, it is a principle of our order most strongly inculcated that he prepare himself as every other citizen should do to meet the requirements of his country. The power which he has so largely delegated to another class, which empowers the few to legislate for the many, has not been productive of the greatest good to the greatest number. The farmer should have learned before this that if he would eat his own dinner he must guard it himself while he performs his labor, rather than trust it to the care of another hungry than himself, although the greatest anxiety be felt to relieve himself of that responsibility."

Talmage says: "The machinery of bad American politics just now consists of five hundred wheels, but the cogs of those wheels play into one great wheel, and that great central wheel has a tire made out of railroad iron, and on that wheel is a crank, and that crank is the hand of Satan, and as he moves the big wheel all the smaller wheels spin round in the manufactory."

"God did not make the Atlantic Ocean for a few great whales to swallow up the small fish. Nor did He make this country to furnish a few fat magnates with blubber. The greatest blessing of this country is the railroads, made for us to ride over; but we must not lie down as the 'sleepers' and let the railroads ride over us."

The Dairy.

Death of the Most Celebrated Cow in the United States.

Jersey Bel of Scituate (7328) the property of Mr. Charles O. Ellms, of Scituate, Mass., died on the 11th inst., of milk fever, having dropped a bull calf the day previous. She was generally regarded as one of the most valuable Jersey cows in this or any other country, and many connoisseurs pronounced her the best that has yet been produced. She was dropped July 10, 1871, got by Victor (3550) out of one of his own daughters. She had always been an exceptional butter yielder since first coming in at three years old. A peculiarity of her cream and butter was its depth of golden color, which was maintained throughout the year, being of the same shade upon winter feed in February that it was on grass in June. In her seven-year-old season, Mr. Ellms tested her separately for a year, and obtained 705 pounds of butter within the 365 days, a yield that made her famous throughout this country and England. A year ago in June she gave, with extra feed, 25 pounds and 3 ounces of butter in a single week. The first calf, dropped in 1870, was butchered. The others are still living. Of the females Mr. Ellms retains three, one of which has given 18 pounds of butter in one week, and a fourth belongs to H. S. Russell, of Milton, Mass. There are three bulls of the oldest-kind, King of Scituate, is owned by Mr. Orestes Pierce, of California; the second, Duke of Scituate, owned by Mr. A. B. Darling, of New York, and the calf just dropped which belongs to Charles L. Sharpless, of Philadelphia, Pa. As all have large and prominent herds of Jerseys the blood of this famous cow is likely to become widely perpetuated.

Creamery at Humboldt, Iowa.

Messrs. Baker & Savage, of the Nettete Creamery, located their creamery on the banks of the Des Moines river that a good supply of water might be convenient, and it was for awhile this season a little more convenient than they anticipated. In fact, the river seemed determined, at one time, to hurry them out of town on a free trip to New Orleans. The water was up in the engine room for some time, but did little damage.

The creamery is paying 16c per inch for cream, and taking from about 1,000 cows.

From this number they only get 800 lbs. of butter, or an average of only one-half pound per cow. This seems a very small return and could undoubtedly be doubled by careful selections of the best cows, and more attention to pastures and fodder crops.

In older dairy regions, cows are expected to yield, on an average, from 1 to 2 pounds for a number of months, and it is evident that the profit must be on those that do the best.

Careful selection and breeding of milk cows would, without doubt, more than double the profits of this business. One other point is of just as much importance, however, as good stock, and that is good and abundant pasture.

No one need expect large returns from cows which are left to pick up their feed with the large herds, or with a crowd of stock cattle and calves. Milk cows need a good pasture of clover, blue grass, timothy, or some of the native grasses; one where the grass is abundant, tender and free from weeds.

The capacity of the Nettete creamery is one ton per day, and they are now running ten teams. The proprietors would no doubt be glad to have the supply of cream doubled or trebled and the patrons can double their own profits by a little more care and better management.

Break up your poorest pastures; put in winter rye and in the spring harrow in a mixture of about ten lbs. of red clover seed, ten of blue grass and six of timothy to each acre. In one year you will get more from this pasture than you could from the same land under cultivation.—Iowa Homestead

Buttermilk.

For a summer beverage, there can be nothing more healthy and strengthening than buttermilk. It is excellent for weak or delicate stomachs, and far better as a dinner drink than coffee, tea, or water, and, unlike them, does not retard, but rather aids, digestion.

A celebrated physician once said that if every one knew the value of buttermilk as a drink, it would be more freely partaken of by persons who drink so excessively of other beverages; and further compared its effects upon the system to the cleaning out of a cook stove that has been clogged up with ashes that have sifted through, filling up every crevice and crack, saying that the human system is like the stove, and collects and gathers refuse matter that can in no way be exterminated from the system so effectually as by drinking buttermilk. It is also a specific remedy for indigestion, soothes and quiets the nerves, and is very somnolent to those who are troubled with sleeplessness.

There is something strange in the fact that persons who are fond of buttermilk never tire of singing its praises, while those who are not fond of it never weary of wondering how some people can drink it. So far as is possible, people should overcome their aversion to it, and learn to drink it for health's sake. One gentleman of our acquaintance is so extremely fond of it that he knew him one time to drink about three glasses, then set his glass down with a thud, exclaiming earnestly as he smacked his lips: "That's food and raiment both!" While another buttermilk enthusiast made the statement once that where the liver has become lifeless from torpidity and inaction, and is too dead to perform its functions, buttermilk will cause a new one to grow in. Whatever exaggerated statements may have been made concerning buttermilk, its medical properties cannot be overrated, and it should be more freely used by all who can get it.

The Skeleton of a Story.

A skeleton always forms an excellent outline for a sensation, and so it proved the other day when one of Janesville's young valiants was fooling with a pair of embryonic doctors. One of them engaged the attention of the young man, while the other stepped to the cupboard, and taking an articulated skeleton by the nape of the neck, or where the nape ought to be, brought it out, and started with it in front of him, right toward that young man. There was a yell like the war cry of a cat convention on the woodshed, and that young man rushed out of that office like a dog running a race with an oyster can. It was a rush for life. He struck the stairs and the stairs struck him. The bottom was reached before he got half way down, and as he gathered himself up, he swore vengeance, and sleep rested not upon his eyelids until he had planned his campaign of wrath against that young doctor.

It was not many nights after before his plan was carried into execution. Calling to his aid in confidence the young doctor's chum, he secured possession of that skeleton, daubed its eye sockets with phosphorus that they might send forth ghastly glances, and snugly tucked it in the doctor's bed, covering it carefully with the quilts, and hiding it from sight until the young doctor should turn back the clothes to get into bed. The plan worked well. The young doctor came to his room, and as was his wont, sat by the window for a time, enjoying a smoke, and meditating in the dim light thrown into the room by a friendly lamp-post across the street. His smoke ended, his meditation over, he started for that bed. The young man, with a group of friends,

was waiting and listening in the adjoining room for developments, and as they heard him step across the room they held their breath and stretched their ears to catch the first sound of fright. They had not long to wait. A loud shriek was heard—"Holy Moses!"—together with the sound of a man falling. A dead silence followed, and for a minute or two the listeners waited for some sound of life, while the remembrance of cases where fright had caused death or insanity danced before their eyes. At last one exclaimed, "He's fainted," another cried "He's dead," and a grand rush was made through the door. As they entered they found the victim of the joke, not swooned or dead, but sitting doubled up on the floor, holding one foot in both hands, and thus trying to give some consolation to the injured feelings of a pet corn, which had in the dark come suddenly in rude contact with the leg of a chair. He hadn't seen the skeleton at all. He and his friends had come in a little too soon, and were themselves more frightened than the owner of the tender corn, and had to explain their prompt appearance on the scene by putting the skeleton quietly back in its cupboard, and asking the young man to stay up a while longer, and smoke.—Janesville Record.

Determined Success.

The writer who talks of the great things that may be achieved by a determined will—by an intense, continuous act of volition to do and be such and such a thing—forgets that this power of willing strongly is, to a large extent, a gift of nature, and as rare as any other good thing in the world. As a sensible writer says: "A man starts on his career with a tacit understanding with himself, that he is to rise. It is a step-by-step progress. He probably has no distinct aim. It is only in books that he resolves from the first dawning of ambition to become owner of such an estate, or bishop of such a see. But he means to get on, and labors to that end. He fixes his thought beyond immediate self-indulgence, chooses his friends as they will help the main design, falls in love on the same principle, and habitually deferring to a vague but glowing future, learns to work toward it, and for its sake to be self-denying and long sighted. His instincts quicken; he puts forth feelers, which, men who take their pleasure from hand to mouth, have no use for; he lives in habitual caution, with an eye always to the main chance. Thus, he refines and enhances that natural discretion which doubles the weight and value of every other gift, and yet keeps them on an unobtrusive level, leaving itself the most notable quality, till he is universally pronounced the man made to get on by people who do not know that it is a steady will that has made and kept him what he is."

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A. J. CHILD,
GENERAL PURCHASING AGENT
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We furnish first-class standard plows at the following prices, on board cars in St. Louis. Cash with order:

STEEL BEAM, SINGLE SHIN.	
10-inch	\$10 50
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12 "	11 75
15 " Three-Horse	15 00
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STEEL BEAM, DOUBLE SHIN.	
12-inch	\$13 09
14 " Two-Horse Only	14 25
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16 "	16 25
WOOD BEAM, SINGLE SHIN, BAR SHARE.	
10-inch, Low Landside	\$ 8 50
11 "	9 00
12 "	9 25
14 " " 2-Horse	10 75
15 " " 3 "	11 25
16 " " 3 "	13 00
WOOD BEAM, DOUBLE SHIN, BAR SHARE.	
12-inch, Medium Landside	\$10 75
14 " " 2-Horse	12 25
15 " " 3 "	13 25
16 " " 3 "	14 25

RIDING PLOWS.

We furnish the Peoria Riding Plow, which, with the improvements made within the last year, is now conceded to be the very best riding plow in use which has the plow between the wheels. For lightness of draft, quality of work, and the perfect control the driver has over the plow, it excels all others. We also furnish the celebrated Hughes Riding Plow. This is the only plow which works with both wheels on the hard ground; the plow being on the side, in plain view of the driver. This plow runs independent of the motion of the frame. And while the work may be over rough corn ground, the plow preserves a uniform level, thus leaving a plain, smooth surface. The reputation of the Hughes Plow does not rest upon any bolstering up by us—wherever it is in use, it supersedes all others.

We are not at liberty to publish the prices at which we furnish the above riding plows, but will cheerfully give prices on application; and can assure our friends they are beyond competition. Address A. J. CHILD, St. Louis, Mo.

FANNING MILLS.

We offer the celebrated Lowe's Improved X. L. N. T. Fan Mill, with grass seed sieves included, for \$18 on cars in St. Louis.

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Send for descriptive circular and prices of the best grain drill in use. A. J. CHILD, St. Louis, Mo.

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A SAFE AND SURE REMEDY FOR
Rheumatism,
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Sprains
AND
Bruises,
Burns
AND
Scalds,
Toothache
AND
Headache.

PAIN-KILLER is the well-tried and who want a sure and safe medicine which can be freely used internally or externally, without fear of harm and with certainty of relief. Its price brings it within the range of all, and it will annually save many times its cost in doctor bills. Price, 25 cents, 50 cents, and \$1.00 per bottle. Directions accompany each bottle.

FOR SALE BY ALL DRUGGISTS.

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Fruits in their Season a Specialty.

We offer to shippers 12 years experience, promptness and the best location in the city. Market reports, stencil plates, &c., free on application. Refer to Editor Rural World.

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AXLE GREASE
Composed largely of micas, it is the BEST and CHEAPEST lubricant in the world. It is the best because it does not gum, but forms a highly polished surface over the axle, reducing friction and lightening the draft. It is the cheapest because it costs no more than inferior brands, and one box will do the work of two of any other Axle Grease made. It answers equally well for Harvesters, Mill Gearing, Thrashing Machines, Corn Shellers, Carriages, Buggies, etc., etc., as for Wagons. It is GUARANTEED to contain no Petroleum. For sale by all first-class dealers. See our Pictorial Cyclopedia of Things Worth Knowing mailed free. MICA MANUFACTURING CO., 31 Michigan Avenue, Chicago, Illinois.

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TURKISH OR RUSSIAN BATHS.

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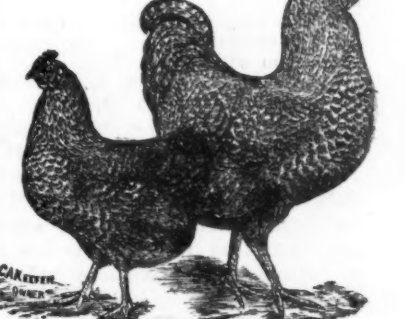
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Every Kind of Crop, and All Kinds of

VEGETATION.

Pamphlet containing full information, sent free by mail to any farmer who takes interest enough in this subject to send me his name and Post-Office address. A. W. HEEMANN, No. 208 & 209 S. 3rd St., St. Louis, Mo. 24-13



Plymouth Rocks

A few pairs or trios of choice Plymouth Rock fowls for sale. Also eggs from choice breeding stock at \$2 per setting of 13. Address COLMAN'S RURAL WORLD, St. Louis, Mo.

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Trammel, hoop and bird nets always on hand. Send for price list.

C. & F. CHENOT,

No. 234 South Main street, St. Louis, Mo.

Wine for Sale.

Cencord, Catawba, Ives' Seedling, Virginia Seedling—all pure grape juice. A no grape and apple brandy. Will sell by the gallon or barrel. The wine is warranted. Apply with reference to H. J. WEBER, 16-17 JOHN T. WALTER, Baden, Mo.

Wanted.

A good reliable salesman to sell nursery stock who is experienced enough to assist in budding, packing, &c., &c., during the busy season. Apply with reference to H. J. WEBER, 16-17 JOHN T. WALTER, Baden, Mo.

COLMAN'S RURAL WORLD. NORMAN J. COLMAN. \$1 Per YEAR.

ADVERTISING: 25 cents per line of space; reduction on large or long time advertisements.
Address NORMAN J. COLMAN, Publisher.
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\$15 Worth of Books Free.

Our readers will see "\$15 worth of books" advertised in this paper. To any one who will send us eight subscribers for one year, we will send, without charge, the \$15 worth of books as a premium. How can any one get a small library cheaper?

In writing to advertisers, please state the advertisement was seen in this paper.

The famous Jersey heifer, Jersey Belle of Seitate, died recently. A short time previous her owner was offered \$20,000 for her.

Capt. Dan Carroll is rapidly completing arrangements for the festival at Creve Coeur Lake August 21st the affair will be a grand one.

Travel to the east is about as low now as it ever can be. The trunk lines have cut in as deep as they possibly can and it is a good occasion to take advantage of.

Norman J. Colman has accepted invitations to speak at farmers' picnics at Villa Ridge, Ills., August 17th, and ten miles southeast of Shelby, Shelby county, Mo., on August 20th.

About the only man who feels badly about the comet business is the individual who offered a reward of \$200 for every new one seen this year. He will soon be able to gaze upon \$600 worth of nebulae at one time.

The boom in produce, small fruits, etc., continues, and many restaurant keepers have been compelled to reduce their bills of fare and increase rates. Hotels have also been compelled to raise their prices to regular boarders.

The president continues to improve rapidly notwithstanding the fact that hundreds about him have been stricken down with malaria. Providence and a wonderfully powerful constitution have brought him through splendidly.

The fruit crop of Missouri this year is very light. There are no peaches, the extreme cold of last winter killing the fruit buds. There are but few pears and there is not half an apple crop. Grapes are a fair crop, though thinned out some by rot.

"Our Little Ones" is one of the best publications in the country for our little ones. It is published by the Russell Publishing Company, Boston, Mass. It is in magazine form, and makes the little ones dance with joy every time a new number is received.

The eighth annual tournament of the Illinois State Sportman's Association will be held at Kleinman's Park, near Chicago, Aug. 2, to Aug. 6, inclusive. There will be a large delegation from Missouri as spectators and an inter state tournament may be the outgrowth of the affair.

Rain is much needed. It is true we had quite a nice shower about ten days ago in St. Louis and a small scope of country adjacent, but the earth and vegetation drank up the rain in short order and are in great need of more at this writing. Corn is suffering very much and pastures are seriously hurt.

The bolsters springs for farm wagons add greatly to the comfort of those who ride in them, prevent jolting, and should be in general use. Every farmer should have a pair of them. After he has used them two or three times, he would not sell them for double what they cost, if he could not obtain another pair. They are sold by the Sample & Birge Manufacturing Company of this city.

If the rewards aggregating \$55,000 offered by the governor and the railroad authorities for the detection of the Winston train robbers and the James boys do not tempt the cupidity of some of their pals, either their cupidity is not deep or their fear or their friendship is overwhelming. It is very doubtful as to whether the movement will result successfully.

The fishing and sportsmen's clubs in Missouri will vigorously prosecute all infringements against the game laws. Now, a supplementary law or two to protect fish and game from sportsmen, when in season, would not be a bad idea. These gentlemen's "strings" and "bags" during the shooting season promise as steady and certain extinction of game and fish in this section as has been marked in the east.

Wheat would command an enormous price this year, if the foreign demand were as great as last year. France produces a very fine crop of wheat this season, Russia a large crop, but Great Britain only a moderate crop. Great Britain will want some of our wheat, which will keep up prices. If we had

the crop of wheat in this country this year that we had last year, with the small foreign demand that we shall have this year, it would bring about sixty-five cents a bushel; but our small crop here this year will carry up prices to \$1.30 or \$1.40 we think before Christmas.

The great luxury of ice in this hot weather should cause every farmer who has not an ice house to set his wits and his hands to work to make one, and also to make a pond to produce the ice, unless he has one already, or can get the ice near by. Ice is really indispensable to the household. How can milk, butter and fresh meat be kept sweet without ice? A room should be partitioned off, in every ice house, to keep such things cold. Soft butter, sour milk and cream, and salt meat, continuously are not just the thing, and yet without ice, these are what the farmer's wife must furnish. By all means make a pond for ice and fish, and then make an ice house.

A most refreshing spectacle in connection with the president's illness, is the picture it has represented of a really typical American family. A good father and mother surrounded by well bred and affectionate children is by no means as rare a spectacle as is supposed by many who view us through peculiarly colored spectacles. The truth is that newspaper correspondents and book writers have been too much in the habit of representing the *outré* types of Americans as seen abroad as representative. The country would have but little show for its greatness did it depend upon the empty headed noodles who pass most of their time "doing" Europe, and endeavor as far as possible, to discard their national traits and peculiarities.

For sowing rye in corn, there is nothing so good as Cahoon's patent broadcast hand-seed sower, advertised by the L. M. Rumsey Manufacturing Co. of this city. One can ride a horse, and then be above the tops of the corn and scatter the seed evenly over the ground. There is a great need of winter pasturage in the west, and there is nothing superior to rye for this purpose. It keeps all kinds of stock healthy, and especially young stock. It is an excellent fertilizer for land, if turned under green, and increases the yield of the corn crop very much the first season after plowing. It can be pastured in the early spring, and then a good crop of rye can be raised. The straw is in great demand in all cities, bringing more per ton, if threshed straight, than good timothy hay commands. If sown this month in corn fields, and the cultivator run through the rows, a good crop may be looked for next summer. If a heavy rain falls soon after sowing, the use of the cultivator may be dispensed with. To dairymen, green rye pasturage in winter is very valuable; and for calves, colts, lambs and pigs, nothing is better. This is the month to sow the seed.

Sorgo at the North.

EDITOR RURAL WORLD: The cane at Hooperton and Crystal Lake is growing finely—now six to seven feet high. The works at both places have been thoroughly refitted, the vacuum pans tested and skilled operators are waiting to give the sorghum business a fair show this season. Last year machines for both places were a month behind time. This season we are prepared in advance and have eight hundred acres of cane to work up. Enclosed find remittance for which please send twelve copies of the RURAL.

F. A. WARDNER & CO.
Chicago, July 27th, 1881.

Invitation.

COL. N. J. COLMAN: I am requested by the committee of arrangements for a grangers' and farmers' picnic, set for the 11th of August next, to ask if your services as a speaker can be obtained for that day by notice to you by telegraph on the 8th, and on what terms you can come?

C. W. SIBLEY.
Pana, Christian county, Ill., July 30.

REPLY—Our services can be obtained. The only terms would be the defrayment of expenses, amounting probably to \$10 or \$15.

COL. N. J. COLMAN: Will you do me the favor to inform me where I can get a good jack? I want a good, young jack, and if you refer me to any one, be sure it is a reliable party; but I prefer to hear from you personally.

JAMES H. PROCTOR.
Camden, Ark., July 22d.

REMARKS—We do not know of any for sale. Any one having one can address you.

Our Farm Proverbs.

1. Spend thy evenings at home in study, and thy profit will be greater than if ten evenings were spent in the house of the publican.
2. Make thy hay while the sun shines, and in the summer season, then thou wilt not need to buy it in the winter.
3. Conquer the weeds in thy prosperity, else they will conquer thee in thy affliction.
4. A good roof on thy house is better than many mortgages, and a hedge that will keep out thy neighbor's mule better than a suit at law.
5. The cook who serves thy food should know her business; how much more necessary, then, that thou who groweth it, should understand thine.
6. Give thy children knowledge; it is better for them than money at usury.
7. The grain devoured by the rat in thy crib would feed two pigs.
8. Teach thy daughter how to crimp her hair and to flirt with her fellow, then the nice young man who parts his

hair in the middle will ask her to marry him. He that keepeth a dozen dogs will not have to do his own barking.—Revised Edition.

Insects During the Spring of 1881.

Prof. Cyrus Thomas, entomologist Illinois State board of agriculture, says: It was supposed by many that the cold of last winter would have the effect of destroying, very largely, the injurious insects. But the result has proven the correctness of the opinion of entomologists, that cold winters are not necessarily injurious to but comparatively few species, the development of numbers depending more upon the amount of moisture and temperature of the preceding summer and fall, and the following spring, than upon the temperature of the winter. The moisture having been very unevenly distributed over the state last season, the result upon the insect fauna this spring corresponds in a large degree therewith.

In some sections some of the more notoriously injurious species, as Hessian fly, army worm, potato beetle, and chinch-bug, have appeared in considerable numbers, but as a general rule over limited districts, and not over the state generally.

The army worm made its appearance in several parts of the state, both of the southern and central sections, the damp, cloudy, and somewhat cool weather favoring its increase—showing that Dr. Fitch's theory, that a damp spring following a dry autumn favors their development, is correct. If these worms appear in a meadow in such numbers as to indicate its certain destruction, it will be best while they are yet young to plow them under and plant the field in some other crop, and thus prevent injury to the crops in other fields, for it is impossible to destroy them and also save the meadow. In my report, which will soon be issued, will be found a long article on this species.

I have received worms from the northwest part of the state which are working on the timothy, and supposed by those sending them to be this species, but it is quite distinct. I have not been able to determine the species by the larva, and am therefore waiting its appearance in the moth state to settle this point. It appears to be a hitherto unobserved enemy to timothy.

The Colorado or ten-lined potato beetle appeared in several sections, but so far as I have learned, not doing any serious injury except to occasional patches. When they attack my potatoes I kill them by hand, and use no Paris green or other nostrum. If this is commenced when they first appear, and kept up for a short time, they are comparatively easily conquered. This year I killed them by mashing them between two shingles without picking them from the plants. Turkeys turned into the patch ate a few, but not enough to do any material good.

The Hessian fly has injured wheat to a considerable extent in some localities in the southern part of the state, and I fear that this crop will show, when gathered and threshed, a lighter yield than is at present counted upon, partly on account of the injury inflicted by this and another species hereafter mentioned, and partly from the effect of the past unusual winter.

The other insect alluded to as injuring this cereal is a small maggot-like worm, bearing a close resemblance to the joint worm. In my attempt to rear it to the perfect state last season only one fly was obtained, which proved to be a species of "chlorops," closely allied to the European species, which often does great injury to wheat. But as there was some doubt in reference to this specimen, I do not assert positively that it was the culprit. The same worm is found in the wheat this season in large numbers, but has not yet reached the perfect state. Although its operations are somewhat different from those of the joint worm, as given by all the authorities, I now fear it will prove after all to be that species. It is not confined to the joints, being found generally in the stem between the nodes; nor does it cause swellings on the stem, as the joint worm is known to do. It may prove a formidable pest.

The only remedies that I can suggest for this and the Hessian fly in the winter-wheat sections is to thresh out the wheat as soon as possible, scatter the straw over the stubble, and burn it. Late sowing, when the fly appears in the fall, has been generally recommended. If we were certain the winter would set in early, this would prove beneficial, but as this is not usually the case in the extreme southern portion of the state I very seriously doubt the value of the remedy for that section. If the fall is warm, the fly will reach the perfect state before winter, and when this happens it is certain to be destroyed.

The Army Worm.

Chicago, July 21.—A pest that resembles the army worm and goes by that name, though substantial differences between the two are discernible, has made its appearance in the out fields of Illinois. The fall wheat was seriously damaged by the severity of the winter and the spring wheat was retarded by the lateness of the season. The farmers have had to plow up their wheat fields to a large extent and sow them with other crops in order to get anything from the soil, and now comes the army worm and devours the oats. The worm is chiefly found in the northern part of the State. The rapidity with which it works is shown in the statement of a correspondent that a field of forty acres of oats was destroyed in forty-eight hours. The worms appear to be governed by considerations that are unfathomable, for they will completely destroy one field of oats and leave another field, separated only by a rail fence, untouched. Unfortunately, however, the fields left untouched are not ravaged by the worms, but are left to rot and decay. The worms discriminate between the tender and succulent stalks and those that are comparatively old and dry. The latter they avoid. Estimates of the loss cannot be made with any degree of accuracy, as the worms are still at work and nobody knows what they may accomplish before they get through. It is impossible to tell exactly how much harm they have done in the fields that they have visited because as just stated, they do not destroy

every stalk, and not till the crop is harvested will they know how much in the ravaged fields was too dry to suit them. But it is certain that the damage is immense, and in Will county it is believed that it cannot fall below 1,000,000 bushels, and if the worms move faster than the oats ripen the loss will exceed that. Although oats are the favorite food the worms will not go hungry when they can find none of this grain. In default of this grain they attack the young and juicy corn stalks.

Leaks on the Farm.

How many times as you are driving through the country you see a nice new mower or plow left in the field exposed to the weather from one year's end to the other, and, in fact, over one half of one's valuable tools left exposed to the inclemency of the weather, when for a mere nominal sum you could build a shelter for them. The result of all this is that it will cost you more for repairs in a few years than you could buy a new implement for.

Another and very important point to be noticed is the proper cultivation of your crops. A great many have the much mistaken idea that the least amount of labor bestowed upon a crop the better, but above all thoroughly prepare your land before planting, and as soon as weeds begin to start go over your crop with a smoothing harrow, as this will exterminate the first crop of weeds. If you keep the weeds down at first you will have very little difficulty during the season, for it is much easier to hoe than to harvest a crop that is half weeds.

Still another very essential point is to take proper care of what you have. It is much better to plant one acre and take care of it than to plant two acres and leave it to the mercy of the weeds, for you will derive more benefit from the acre well cared for than from the two acres half taken care of, and you will have only half the amount of space to cultivate.

Another great loss is the neglect to take proper care of your building. How often you see a house or barn without a coat of paint. The paint not only preserves the building but prevents its decay. Many times you see a man driving along with his wagon jingling like a threshing machine, simply for the want of having a tire set, or because a bolt is missing. The consequence will be that the spokes will get loose, the felloe split, and presently that man will have a bill of two or three dollars to pay the wheelwright for repairs on the wheel, when if the matter had been taken in season, the blacksmith would have put him all right for fifty cents.

Lime as a Manure.

Mr. R. Gordon of Gordonston, Aberdeenshire, Scotland, writes on this topic as follows, in the North British Agriculturist:

"Lime is one of the most important natural manures we possess, and the value of its application to the soil has been known from very early periods. The action of lime as a manure is entirely regulated by the form and manner in which it is applied to the soil. Quick lime should be used for heavy and tenacious soils, as well as those containing a fair quantity of vegetable matter. On the other hand, if the soil be light and friable with little vegetable matter in it, caustic lime would in such a case do more harm than good. Mild lime ought to be used, treated with a mixture of earth, and exposure to the atmospheric air, from which it takes carbonic acid, which takes away a great deal of its caustic properties. The different circumstances and conditions of soil will not allow a uniform practice to be adopted; but judgement and experience ought to regulate the application of all manures. Every farmer should study his own soil, and thereby he would be able to avoid the misapplication of good manure. Before the introduction of artificial manures, lime was more universally used than now, which helps to account for the poor crops of clover, and the difficulty of raising good turnips. It is essentially necessary that the soil to meet the requirements of the various crops. Every cultivated plant needs a supply of lime for the proper building up of its structure, and in combination with phosphoric acid, lime forms a large portion of the skeletons of the animals who feed upon the crops. A soil may contain large supplies of every ingredient which a crop requires, and still be unable to yield them to the plant, they being in an inactive state, as it is only that portion of the soil which is soluble in water which is available as plant food. Any analysis of a soil which only tells its composition, is of little value unless it can show the active matter ready to be taken up by the crop. Lime acts upon the dormant matter in the soil, and performs the important function of rendering these active. Clay soils generally contain within themselves potash and soda, and we know by experiment that lime liberates these inorganic elements. According to Prof. Way, lime helps to form a valuable class of salts known as double silicates or aluminas, which has the power of absorbing ammonia from the atmosphere. Lime neutralizes the acids in the soil and sweetens the herbage, besides supplying food for the perfect growth of the crops. It is thought by some to be a wasteful practice to allow lime to come in immediate contact with farm yard manure, thinking it is one of our best natural manures. However, it can not be expected to produce its full effects immediately after being applied.

If you are bilious, take Dr. Pierce's "Pleasant Purgative Pills," the original "Little Liver Pills." Of all druggists.

Le Duc's Tea Farm.

Le Duc's famous tea farm appears to be a miserable sham and a pretense. Commodore Saunders, long connected with the Agricultural Department and well known in connection with the National Grange, was recently sent to South Carolina by Commissioner Loring to investigate the experiments in tea culture of which Le Duc had made such extensive advertisements. Mr. Saunders has made his report to Commissioner Loring. He shows that the tea farm is simply one of those exhausted plantations of which the south has so many, literally worn out by successive crops, without care or fertilization. There is upon the place the ruins of an old mansion once occupied by a former governor of the State, and an artificial lake in which there is not a drop of water. The money expended by Gen. Le Duc thus far seems to have been mainly appropriated to remove the old ruins and in attempting to rebuild the mansion and laying out an avenue through the grounds. It does not appear what particular relation the expenditure of money for that purpose has to the cultivation of tea. Gen. Le Duc proposed to fill up the lake, build an iron bridge over it, and possibly to cultivate his tea, planted in pots, on that bridge. The soil, according to Saunders' report, is poor, hungry sand, some portions of which may possibly have once been classed as a poor sandy loam, but it now can support only the scantiest kind of vegetation, and has scarcely a trace of loam. It is in no sense adapted to tea-culture. Mr. Saunders thinks that the tea experiments, if they are to be made at all, should be made much further south, and he believes that Florida presents the most favorable condition. He reports that at present some \$300 per month is paid for the supervision of \$60 worth of labor. The only results of the \$15,000 appropriated by Congress for tea culture are to be found on this farm. The place has not even a stable for the mules. Mr. Saunders recommends that the farm be abandoned and that one person be retained to take charge of the tea plants already there. Dr. Loring will take the matter under advisement.—Chicago Tribune.

Another Cabinet Officer.

Is wanted at Washington. The Mirror and Farmer at Exeter, N. H., in noticing the appointment of Dr. Loring as commissioner of agriculture has this to say:

"We sincerely congratulate the doctor, the president and farmers upon this appointment. We think a man like the doctor, standing officially at the head of American agriculture, which, besides most feeding fifty millions of people, furnishes four-fifths of our exports, ought to have as much influence in shaping the administration of our government as he who is 'head-clerk' of a few old ships called the navy, or he who is the same to twenty-five thousand men called the army. We would make Loring a cabinet officer."

And why not? Why should not the agricultural interest of the country be placed upon something near the elevated position it should occupy? George B. Loring or any other capable man at its head, it matters not who, the great increasing importance of American agriculture requires that its claims should be more fully recognized. Its chief ought ere this to have been made one of the president's advisers. It is a matter of astonishment that this much needed change has been so long delayed. If our national legislators would devote less time to squabbles over the distribution of official patronage, and more to the needful legislation, they would more faithfully fulfill the duties they are sent to perform.—Keokuk Constitution.

The Wood Pulp Monopoly.

A reader desires an explanation of what wood pulp means, and why its position on the tariff sheet provokes indignation. Wood pulp is a leading ingredient in the manufacture of paper. The paper upon which the Observer is printed is from one-quarter to one-half wood pulp; its proportion in other kinds of paper varies with the quality of the article. It is made by sawing spruce and poplar logs into blocks and running them through fiber machines. A very few men own the patent upon this process. Last year it was asserted that Congressmen Warner Miller, of New York, and Russell, of Massachusetts, were the sole owners of this process in the United States. It may be that some others are interested in it, but to all practical intent these two may be regarded as the American proprietors of the monopoly. Owning this, they are able to say how much wood pulp shall be sold for, and thus regulate the price of paper. They have grown wealthy by forcing up this price and by preventing the importation of wood pulp under heavy duties—levying a direct tax upon the education and intelligence of the country.

The newspapers and publishers and the general public united fifteen months ago in the demand that wood pulp be stricken from the tariff sheet and placed on the free list. The object of this demand was to throw open the market to Canadian competition—not because there is not wood enough over here, but simply to force this handful of monopolists down to a decent price. The two congressmen named above made a desperate fight against the popular demand and succeeded by dint of combination with other congressmen, who wanted protection for other articles, in keeping their monopoly. It is because of this that the New York Times, Tribune and Evening Post, the Utica Herald and very many other Republican papers denounced Warner Miller as an unfaithful representative of the people.

Life in Florida.

We will freely admit that our summers are longer than we like, but they are far more pleasant than in Ohio or any other State north, where we have spent many hot, sultry days. Here we always have a cool breeze from the ocean or gulf, making it very pleasant in the shade at noonday. In midsummer, work stops at eleven to half past eleven o'clock, and is not resumed until 2 p. m. We have never heard of a sun-stroke, and my old friend Judge Speer told me he had lived here thirty-eight years and had never heard of a case. We have our daily rains in June, July and August. A good shower falls almost daily, which keeps us refreshed as to health. We have twenty-eight settlers in a radius of two and a half miles of us, and in the past five years but three persons have died, the youngest being seventy years old. One had lived here fifteen years, the

other six, and the latter had been an invalid for twenty years. We never have need of a doctor. We enjoy the best of health in proportion to our diet. No preparation is needed here for winter; hence the "natives" do not work like New Englanders, as they live principally off a sweet-potatoe patch and milk from a few cows. Such livers have a bad color, but we all get bronzed with tan from the wind and sun. Work as you do north and use a similar diet, and I will warrant a good health in Orange county, Florida, as can be had on the globe.

Fairs for 1881.

STATE AND DISTRICT FAIRS.
Illinois, Peoria, Ill., Sept. 26 to Oct. 1.
Ohio, Columbus, O., Aug. 29 to Sept. 2.
Pennsylvania, Pittsburgh, Pa., Sept. 5 to 11.
Indiana, Indianapolis, Ind., Sept. 26 to 30.
Iowa, Des Moines, Ia., Sept. 26 to 30.
Wisconsin, Fond du Lac, Wis., Sept. 26 to 30.
N. W. Agr'l and Mech'l Ass'n, Oshkosh, Wis., Sept. 12 to 17.
Nebraska, Omaha, Neb., Sept. 12 to 18.
Minnesota, Rochester, Sept. 5 to 10.
Chicago Exposition, Chicago, Sept. 7 to Oct. 1.
St. Louis Fair, St. Louis, Oct. 3 to 8.
Montana, Helena, Sept. 26.
Texas Capital State Fair Ass'n, Austin, Oct. 15 to 22.
Michigan, Jackson, Mich., Sept. 19 to 23.
Tri-State Fair Ass'n, Toledo, Sept. 12 to 17.
Kansas State Fair Ass'n, Topeka, Sept. 12-17.
Northwestern Expo'n, Minneapolis, Sept. 5-10.
Central Ohio, Mechanicsburg, Sept. 13-16.

MISSOURI FAIRS.
Saline Co., Sweet Springs, Aug. 15-20.
Pike Co., Louisiana, Aug. 16-20.
Lafayette Co., Higginsville, Aug. 23-27.
Callaway Co., Fulton, Aug. 24-27.
Boone Co., Sturgeon, Aug. 30 to Sept. 3.
Audrain Co., Mexico, Aug. 30 to Sept. 3.
Boone Co., Columbia, Sept. 6-10.
Saline Co., Marshall, Sept. 6-10.
Jackson Co., Kansas City, Sept. 12-17.
Cole Co., Jefferson City, Sept. 13-17.
Monroe Co., Paris, Sept. 13-16.
Pettis Co., Sedalia, Sept. 20-24.
Montgomery Co., Montgomery City, Sept. 24 to 29.
Marion Co., Hannibal, Sept. 27-31.
Moniteau Co., California, Sept. 27-30.
St. Louis Co., St. Louis, Oct. 3-8.
Knox Co., Edina, Oct. 4-6.
Northeast Mo., Williamstown, Sept. 19 to 23.
District Fair, Appleton City, Aug. 30 to Sept. 3.
Platte Co., Platte City, Aug. 30 to Sept. 3.
Nodaway Co., Maryville, Sept. 19 to 24.
Franklin Co., Washington, Sept. 14 to 16.

ILLINOIS COUNTY FAIRS.
Adams county, Camp Point, Sept. 5-9.
Boone, Belvidere, Sept. 6-9.
Brown, Mt. Sterling, Aug. 22-26.
Bureau, Princeton, Sept. 20-23.
Carroll, Mt. Carroll, Sept. 6-9.
Cass, Virginia, Sept. 13-16.
Champaign, Champaign, Aug. 30 to Sept. 2.
Chicago, Chicago, Sept. 2-7.
Clay, Flora, Sept. 27-30.
Coles, Charleston, Sept. 13-17.
Crawford, Robinson, Sept. 27-30.
Cumberland, Prairie City, Sept. 8 to Oct. 1.
DeKalb, Sandwich, Sept. 19-23.
DeKalb, Sycamore, Sept. 20-23.
DeWitt, Clinton, Aug. 29-26.
Douglas, Tuscola, Sept. 13-18.
DuPage, Wheaton, Sept. 6-8.
Edgar, Paris, Sept. 6-9.
Edwardsville, Alton, Oct. 4-7.
Effingham, Effingham, Oct. 4-7.
Fayette, Vandalia, Sept. 21-23.
Ford, Paxton, Aug. 30 to Sept. 2.
Franklin, Benton, Oct. 11-14.
Fulton, Canton, Oct. 4-7.
Fulton, Avon, Sept. 20-23.
Gallatin, Shawneetown, Aug. 30 to Sept. 3.
Greene, Carrollton, Oct. 18-21.
Hamilton, McLeansboro, Sept. 13-17.
Hancock, Warsaw, Oct. 19-21.
Henderson, Biggsville, Sept. 13-16.
Henry, Cambridge, Aug. 29 to Sept. 2.
Iroquois, Onarga, Sept. 13-16.
Iroquois, Watseka, Aug. 15.
Jackson, Carbondale, Oct. 11-14.
Jasper, Newton, Sept. 20-23.
Jefferson, Mt. Vernon, Oct. 11-14.
Jersey, Jerseyville, Oct. 11 to 14.
JoDaviess, Galena, Sept. 27-30.
JoDaviess, Warren, Sept. 13-16.
Joplin, Aurora, Sept. 13-16.
Kendall, Bristol, Sept. 6-9.
Knox, Knoxville, Sept. 12-16.
Lake, Libertyville, Sept. 21-23.
Lake, Waukegan, Sept. 26 to Oct. 1.
LaSalle, Ottawa, Sept. 5-10.
Livingston, Pontiac, Sept. 13-16.
Livingston, Fairbury, Sept. 5-9.
Logan, Lincoln, Aug. 29 to Sept. 2.
Logan, Atlanta, Sept. 6-9.
Macon, Decatur, Sept. 20-23.
Macoupin, Carlinville, Sept. 6-9.
Marion, Centralia, Sept. 27-30.
Marshall, Wenona, Sept. 19-23.
Masson, Havana, Oct. 4-7.
Massac, Metropolis, Sept. 13-16.
McDonough, Macomb, Sept. 13-16.
McHenry, Woodstock, Sept. 13-16.
McLean, Bloomington, Sept. 21-24.
Mercer, Aleno, Sept. 20-23.
Montgomery, Hillsboro, Sept. 27-30.
Morgan, Jacksonville, Sept. 22-26.
Monroe, Sullivan, Sept. 20-23.
Ogle, Ogle, Sept. 20-23.
Ogle, Rochelle, Sept. 6-9.
Perry, Pinckneyville, Oct. 4-7.
Pike, Pittsfield, Sept. 20-23.
Pope, Golconda, Oct. 5-8.
Randolph, Sparta, Sept. 28-30.
Randolph, Chester, Oct. 11-14.
Richardson, Olney, Sept. 13-17.
Rock Island, Port Byron, Sept. 7-9.
Rock Island, Hillsdale, Sept. 14-16.
Sangamon, Springfield, Sept. 12-17.
Schuyler, Rushville, Aug. 30 to Sept. 2.
Shelby, Shelbyville, Sept. 20-24.
Stark, Wyoming, Sept. 6-9.
Stark, Toulon, Sept. 20-23.
St. Clair, Belleville, Oct. 11-14.
Tazewell, Delavan, Sept. 12-16.
Union, Jonesboro, Sept. 13-17.
Vermilion, Catlin, Sept. 13-16.
Vermilion, Havana, Sept. 20-24.
Vernon, Havana, Sept. 20-24.
Whiteside, Moundville, Sept. 6-9.
White, Carmi, Sept. 6-10.
Whiteside, Sterling, Sept. 13-16.
Whiteside, Morrison, Sept. 6-9.
Whiteside, Albany, Aug. 31 to Sept. 2.
Williamson, Marion, Sept. 27-30.
Wanabago, Rockford, Sept. 12-16.
Woodford, El Paso, Sept. 12-17.

COL. COLMAN: Permit me to say to Mr. L. A. Roussel through the RURAL WORLD that if his bleaching process on cane juice is a success, I should like to hear from him soon, with description and prices. I believe many of the readers of the RURAL WORLD would like to read something from his pen if his process is a success.
F. KINGSLEY.
Hebron, Neb., July 10th, 1881.

Young, middle aged, or old men, suffering from nervous debility and kindred weaknesses, should send two stamps for large treatise, giving successful treatment. World's Dispensary Medical Association, Buffalo, N. Y.

Live Stock Breeder.

W. C. France, owner of the great trotting stallion Alexander, not satisfied with the recent defeat of the animal at Chicago has issued a challenge to Samuel J. Morgan, owner of Piedmont, to trot the stallions again at Belmont or Point Breeze, Philadelphia, for \$25,000 or \$50,000 a side. The match has not yet been consummated.

Horses That Stumble.

In the matter of stumbling Capt. Hayes (in his new book "riding on the flat and across the country") goes into its theory, drawing distinctions that may be very servicable. He explains that there are two kinds of stumbling. One is really dangerous, when the horse is either weak in the forelegs, or cramped in the action, or with the physical defect of two straight shoulders. But when stumbling arises from the knee being insufficiently bent or the toe unduly depressed, thereby catching up on and inequality in the ground, it may be safely disregarded, unless the animal is intended for show rather than use. We may add, for ourselves, that we have ridden excellent horses with this failing; that frequently as they might trip or stumble, experience told us that they were absolutely sure-footed; but that what we chiefly objected to was, that in cases when they were nervous, each trip led almost invariably to a succession of others. That such stumbling comes of a slovenly manner of going there can be no doubt.

It happens comparatively seldom in exhilarating weather or when the horse has been brought fresh out of the stable; but when listless and languid, or when fatigue begins to tell, then you are quickly made aware of his condition by his blundering. Capt. Hayes' chapters on flat-racing, steeplechasing and training will be read with interest even by amateurs. He backs up his own opinions and experience on these subjects by communications from well-known trainers and jockeys. As to giving "orders" in a race, his ideas seem to us very sensible. With a young hand, instruction may be necessary, but if the jockey be a fairly good one, the riding should be left to his discretion. It is impossible to foresee all possible circumstances, and decisions must be taken on the spur of the moment. As for starting, he calls attention to the necessity of "getting off" as quickly as possible—a matter in which, though it is obviously of paramount importance, some people would appear strangely indifferent. As he says, "whatever distance is lost in the start must be made up when the horses are galloping, at which time the effort to regain the lost lengths may very possibly be equivalent to throwing away an advantage of as many pounds.—Saturday Review.

The fiber of national character is seen in nothing so much as in our sports. It is to the honor of our English character that the sports of England are manly and sincere. There is a fine touch of poetry in those cabal sentences: "A veteran sportsman says: 'I have seen a few Derbys, St. Legers and Oaks, but never witnessed so much enthusiasm, or heard such cheering as when Iroquois was led back after his brilliant victory.' The best points of the English character come out in this spontaneous tribute of the multitude to the victory of an opponent. We see in this magnanimous recognition of superior merit the first lesson to be learned in the world of sport. What gives sport—its highest value is the fact that its pursuit develops the manliest qualities. The true sportsman is always the man—true-blooded, vigorous, vascular—with-out subterfuge or guile; loving the meadow, the forest; with a clear, clean, beaming eye; his body trained to the highest point of physical uses, and earnest to reach the same perfection in the agencies about him. He must have the best gun, the best ships, the best hounds, the best horses. The straining for perfection, this identification of the man with perfection in all forms and phases, is what should make sporting as much to be cherished by our statesmen and lawgivers as were the Olympian games by the Greeks. There is a fine story of the Duke of Wellington watching a group of Eton boys at cricket. "There," said the Duke, "is where we won the battle of Waterloo." It would be curious to know how far the sporting quality in the American people affected our victories and defeats. When the South began the war it was her sons, injured to the forest and the field—huntsmen, marksmen, horsemen—who swept victory out of our reach. The North began to win when the keen-eyed, strong-limbed men from the forest came to the front and brought into the war the qualities which made them the best lumbermen in Maine, and the best pioneers in Minnesota and Wisconsin.—California Sport.

Stock Notes.

It is estimated that between five and six thousand head of cattle are being grazed in Howell county, Mo., this season. For stock raising—cattle, sheep and hogs—Howell presents better advantages than any other county in the State.

A stiff wisp broom is better to remove the dust and dirt from a horse's legs than a curry-comb. Many horses with their skins are exceedingly nervous and restive in the hands of a careless groom and this nervousness often degenerates into viciousness.

Angus cattle are bringing higher prices now in Scotland than Short-horns. At a late sale a cow brought 225 guineas, or \$1,125, and others, with bulls, from 42 up to 180 guineas. The average price obtained for 15 cows was \$273. It is evident that the breed of Angus cattle is increasing rapidly, not only in Scotland but in England.

Maj. Wm. Gentry sold and delivered the best lot of bees ever shipped out of Pettis county, Mo., to E. W. McElhenny, a week ago. These bees were all thoroughbreds, being the calves of the celebrated Durham bull, Red Cloud, and were raised on Maj. Gentry's farm. There were ninety-six in the herd and they averaged 1,455 pounds.

Recently W. H. Vanderbilt drove his road team, Small Hopes and Lysander, to a top wagon a mile, at the Gentlemen's Driving park, in 2:24, of which the first half mile was trotted in 1:10. Mr. Vanderbilt confidently expects to beat his own record of 2:23, which he made some few years ago, with Lady Mac and Small Hopes, with the above team, within the next month, as they are improving daily.

The thoroughbred colt Hindoo, by Virgil, out of Florence by Lexington, bred by Mr. Swiger, of Kentucky, won in his two year old form \$9,450 for his breeder, and was then sold to the Messrs. Dwyer Bros., of New York, for \$15,000. He is now three years old, has run three times for his new owners, winning each time, viz: the Blue Ribbon, at Lexington; the Ky. Derby and Clark stakes at Louisville; the three stakes aggregating \$9,700. Total winnings to date \$19,750.

Bulk in a horse, either in sire or dam, is not always an indication of strength; it may only develop coarseness of muscle and bone. Strength depends upon the fineness of the texture of the muscles, and also upon the fineness and hardness of bone. Heavy horses as well as heavy men are often a burden to themselves, although we have known of splendid exceptions to them, both in the human and also in the equine race. The thoroughbred is the most powerful of all the other breeds of horses. He will jump a five-foot fence with 150 pounds upon his back, while few other breeds could carry themselves over.

A practical stock grower advises his brother farmers not to be in a hurry to destroy any animal that may break a leg, for by means of plaster of Paris (not land plaster) and some bagging strips, the limb may be set and supported until the fractured bone unites again. His plan has been, both with calves and sheep, to wind the strips of bagging about the broken limb, plaster over with caliche plaster mixed to a thin paste, wind another over that and apply more plaster, the leg being stayed by splints of wood until the plaster sets. The animal would limp around for a few days on three legs, but recovers without blemish.

Kansas City Price Current: The Texas cattle drive for this season is pretty well over already. Most of the cattle that came west have either been delivered or sold. There have been but few sales of herds around the hotels the past week, as most men had previously sold out. Yet the market was firm, and there were more buyers than sellers. The only prominent sales reported, since our last issue were Moore & Allen to Hunter & Evans 2,000 three year-old wintered steers, delivered at ranch near Sheridan, Kansas, at \$22.50 per head. Day & Ellison to Geo. W. West, 6,000 through cattle, ones and twos, to be delivered next June on p. t. Geo. W. West to B. A. Sheldy, 5,000 two and three year old steers, to be delivered the last part of this month at \$16 and \$18. Drumm & Snider, 1,700 wintered three-year-old steers at \$24, to be delivered at Caldwell this week.

Jersey Bell of Scituate (7828), the property of Mr. Charles O. Ellms, of Scituate, Mass., died on the 11th inst. of milk fever, having dropped a bull calf the day previous. She was generally regarded as one of the most valuable Jersey cows in this or any other country, and many connoisseurs pronounced her the best that has yet been produced. She was dropped July 10, 1871, got by Victor (3550) out of one of his own daughters. She had always been an exceptional butter yielder since first coming in at three years old. A peculiarity of her cream and butter was its depth of golden color, which was maintained throughout the year, being of the same shade upon winter feed in February that it was on grass in June. In her seven-year-old season, Mr. Ellms tested her separately for a year, and obtained 705 pounds of butter within the 365 days, a yield that made her famous throughout this country and England. A year ago in June she gave, with extra feed, 25 pounds and 3 ounces of butter in a single week. The first calf dropped in 1874, was butchered. The others are still living. Of the females Mr. Ellms retains three, one of which has given 18 pounds of butter in one week, and a fourth belongs to H. S. Russell, of Milton, Mass. There are three bulls of which the oldest, King of Scituate, is owned by Mr. Orestes Pierce of California; the second, Duke of Scituate, owned by Mr. A. B. Darling, of New York, and the calf just dropped, which belongs to Charles L. Sharpless, of Philadelphia, Pa. As all have large and prominent herds of Jerseys the blood of this famous cow is likely to become widely perpetuated.

Facts About Horses.

An "Equestrian Manager" in England gives the following interesting facts about horses:

It scarcely needs stating that a good memory is indispensable in learning anything. And if a horse has to learn a trick or routine performance, he can only do so by remembering it from time to time of going through it. Both horses and dogs have wonderful memories; but I will narrate one or two instances relating to the horse.

I was once driving to Long-Milford in Suffolk at a spot where there was a bridge, leading over a river. As we approached the bridge, the horse pulled up, and would not move on again without whipping. For some time I was at a loss to account for this freak; but it afterward occurred to me that the last time I had crossed that bridge and with the same horse, I had pulled up at that spot to speak to a man.

Unless there is a reason to the contrary, we always prefer occupying the same field each time we visit a town. Sometimes it happens that the stud-groom, who is generally with the first wagon, forgets which field it is. But by giving the horse his head and leaving him to himself, he will most certainly find him to be wrong, and drives straight in.

When in Southampton some years since, I had to pass up High street daily, and had a different horse almost every day. Which ever horse I had he would slacken speed at the Star Hotel, and want to turn into the yard. Upon mentioning this to the groom, he explained that, five years previously, when the circus was in Southampton, the stud had been stabled at the Star, and the horses had not yet forgotten the place.

I have my opinion, founded upon close and varied observation, that horses can and do convey to each other very exact intelligence by the sounds they produce, from the gentle purr of a full-blooded stallion to the proud, sonorous neighing of a full-blooded

horse, down to the whinnies and snortings, and other little sounds with which all keepers of horses are familiar. Once, in a long stable containing twenty stalls in a row, a horse at one end was dying. Near the other end was a horse of a timid disposition, which showed marked signs of dread and extreme nervousness, as though conscious of what was going on; trembling from head to foot, and streaming with perspiration. I feel convinced that intelligence of what was passing had reached this horse, and that, being a nervous temperament, the poor animal had been troubled to the painful extent we had witnessed.

Care for Animals.

Thou shalt not see thy brother's ox or his sheep go astray, and hide thyself from them; thou shalt in any case bring them again unto thy brother. And if thy brother be not nigh unto thee, or if thou know him not, then thou shalt bring it unto thine own house, and it shall be with thee until thy brother seek after it, and thou shalt restore it to him again.

In like manner shalt thou do with his ass; and so shalt thou do with his raiment; and with all lost things of thy brother's, which he has lost, and thou hast found, shalt thou do likewise: thou mayest not hide thyself.

Thou shalt not see thy brother's ass or ox fall down by the way, and hide thyself from them: thou shalt surely help him to lift them up again.—Deut., chap. 22.

Various Notes.

Jim Malone, who was one of the best 3-year-olds out last season, died recently at Nashville, Tenn.

Mr. James A. Grinstead of Kentucky, has entered two colts in the English Derby of 1883 and two fillies in the Oaks.

Bell's Life says that \$50,000 was offered not long ago by an American gentleman for the English race-horse Isomony.

Peregrine, who ran second to Iroquois, has forfeited all prior engagements, and is being specially prepared for the St. Leger.

Pierre Lorillard has shipped nine more thoroughbreds for the stable at Newmarket, Eng., among them being Aranza and Gerald.

On a recent race day in one of the English meetings, Archer, the jockey of Iroquois, when he won the Derby rode five winners out of seven.

In this country, green corn fodder, properly grown and fed, yields the greatest amount to milk and flesh, for the same expenditure, of any other crop grown.

The experimental cargo of wheat shipped from St. Paul for Glasgow, Scotland, by way of New Orleans, reached the latter port in perfect condition. This simple fact is of vast importance to the west.

The great west is increasing the shipment of dead meat to the eastern seaboard. In time, most of the western cattle will be slaughtered before shipment. The railroads are constantly making improvements in refrigerator cars, and facilities for shipment of dead meat—cattle, sheep and hogs.

Mary's little lamb is now called upon to hide its diminished head. An English milker keeps a flock of geese that are so devotedly attached to him that they have on many occasions followed him a mile to the village, where he went to transact business, and on a recent Sunday they followed him to church. On arrival at the sanctuary he tried to dismiss them, but they declined to be dismissed and wanted to follow him in, and he was compelled to forego attendance upon the dispensation of the gospel and proceed home at the head of his feathered army, making a queer procession, which was no doubt enjoyed far more by the principal participant.

The Pig Pen.

How to Make Pigs Pay.

Pigs must be made to take care of themselves. A farmer cannot afford to wait on them only so far as such labor will turn to profitable account. It pays a farmer to make the pens warm, to give the pigs plenty of bedding, and to shovel out manure. Advantage must be taken also of the season to make the gain on them while the warm weather lasts, as winter fattening is nearly always done at a discount, and always requires stimulating or hardy food, which is the most expensive. A pig will gain as fast again on the same amount of food in warm weather. I have learned this by experience, and it also accords with the philosophy of the case. I last season slaughtered a pen of pigs which did not gain anything for a month. They were fed all of the cooked corn they would eat, but they would not eat any more than enough to hold their own. I consider the month's feeding a total loss, except the manure which they made, and that would not more than compensate for the labor connected with them. The rise in price which was hoped for did not come. It may be set down as a general rule that pigs should be put in to market before cold weather. In old times holding pigs until late in the season was good economy, as the price invariably went up. But nowadays such instances are rare, as the surplus of the west fully supplies the market. I question the economy in this direction of wintering shoats. There is no possible profit in them if wintered on corn, as the growth will not be equal to the cost. It costs as much to winter a pig of this class as it would a breeding sow.

Breeding sows are the kind of porcine upon which a farmer should calculate profits. They should bear young twice a year, and should be kept for a number of years. An old mother is more profitable every way than a young one, as she will bear more young, of better size, and take better care of them not only at the time of birth, but during the period of suckling. When properly trained or educated, an old dam is not half the trouble to take care of as a young one. A pig designed for this purpose should be educated, and if there has been painstaking to fit her for her maternal life, the care of herself and young will be materially lessened, and the risks or losses will amount to little or nothing. She should be made tame and used to handling, as a wild and refractory mother will do constant damage to herself or her offspring. She should be made to follow her owner anywhere. She should always be kept orderly to avoid the risks of jumping fence or other unruly acts. The most important thing is, not to allow the breeding sow to get her full growth; that condition should only be had when fitted for slaughter. What I mean is, that a breeding sow is not a

porke to be made fat and heavy, but rather to be kept lean and simply in a thrifty or strong condition. When fat and heavy she will not take sufficient exercise to be a healthy breeder, and moreover, when she has young she will be clumsy and liable to tread on the little pigs or lay on them.

A fat, overgrown sow will not get up when she feels or hears a young one on whom she is lying; whereas, one in a lighter condition and not so lazy and sluggish would jump up before the little one was suffocated or crushed. A fat sow is liable to be more feverish at the time of weaning, and hence an unnatural mother liable to destroy her young; neither will such a one have so good a supply of milk. I have spoken of double crops in the economy of pig raising. This idea I make practical by first raising a crop of early sweet corn which is fed to the pigs, being cut up green (stalks and all). On the same land a crop of turnips is produced, the seed being sown after the last cultivating of the corn. After a crop of clover has been taken off, the same ground may be turned over, and having been thoroughly cultivated and put in good order, a crop of turnips may also be produced. If the clover should be of an early variety, Swedish turnips, more nutritious, may be grown. A crop of turnips made to follow barley. A few acres of turnips grown as supplementary crop, to which the pigs must be made to help themselves, will make a basis for a plentiful supply of feed, which will lessen materially the cost of pork-making. An acre which may be made to produce from twenty to thirty tons of manure will lay the foundation for cheap wintering. The grain demand will then be cut down to extra feeding to the mothers while suckling, and to the young pigs during the summer and autumn. The breeding sows should be made to live exclusively, with the above exception, on roots or grass or other cheap succulent food, such as sweet corn stalks, sugar-cane, apples, &c. Under this system there is profit in pigs.—F. D. Curtice, in New York Tribune.

Swine Notes.

It is claimed that an acre of ground containing good clover will pasture five head of hogs for four months. Now we believe that it would take pretty near all the corn that would grow on an acre of ground to keep five head of hogs in good condition for that period of time. If we are right there can be no doubt but that clover is the cheapest food for hogs in the summer, at any rate it is attended with no trouble to feed them, and besides, hogs pastured on clover are in a far better condition than if fed on corn, as they are better framed, healthier and eat better, and will fatten better when shut up for that purpose. There is a great difference, however, in breeds of hogs in regard to living on clover. Some are not near as fond of it as others, but Poland China, Suffolk, Berkshire and several other breeds like it.

The thoroughbred pig, in starting a herd, is chiefly valuable in breeding to common stock. By using a thoroughbred boar upon common sows, a half-blood is obtained that does very well for breeding purposes, which can be further improved by selecting the best sow pigs, feeding them liberally, and again getting a thoroughbred boar to use with them. If this is practiced a year or two it will produce pigs equal to pure blood. But grade or impure males should never be used, as the tendency is to run back to the scrub. The thoroughbred if purchased young, can be obtained for a small sum. He can be used one season and then sold, or castrated and fed, when he will, of himself, almost or quite pay for his original cost. Breeding in-and-in in the swine family won't answer. Always use new males.

Pig farming may be profitable or a source of loss. A few pigs of almost any breed can be grown on a dairy farm with profit, but when the number is increased the piggy may become an expense. It is clearly determined by a long experience that pig pork is the pork that pays. Young hogs marketed when a year old are much more profitable than older ones. This being true—and it is especially so in the older States—a breed should be selected that matures early and fattens quickly. The best pig has the least amount of offal in dressing; is compact in its parts, and its flesh is of the very best quality. Of such are the Essex and Suffolk and some other allied "small breeds." One can "go further and fare worse" than to select the Essex for the piggy that is to make profitable returns. There is some prejudice against black pigs, but it should be remembered that the color is less than skin deep; and the blackest pig may be as white dressed pork as any other. There is money in pigs if the right breed is chosen and properly managed. The value of full-blooded pigs over the "grade" is strikingly shown when a pair of the former is taken into a neighborhood where only the "common hog" was before.

The Shepherd.

Edited by R. M. Bell, of Brighton, Mass. Co., Ill., to whom all matter relating to this department should be addressed.

A gentleman of Columbus Ohio has bought 300,000 pounds of wool mostly at 37 cts. and is holding it on speculation.

The Arkansas Valley Wool Growers, Association have pooled their wool and hold for sale at Wichita, Kansas, one hundred thousand pounds. Through their secretary they invite buyers.

One hundred sheep were stolen from the farm of Fredrick Eckert of Auburn township Tuscatan county Ohio a few days ago. This is the biggest and boldest sheep steal on record in that section.

Some Ohio sheep raisers who are readers of the RURAL WORLD intend coming to southern Missouri on a tour of inspection with a view of entering largely into sheep raising in this perfect sheep paradise. They will bring Ohio and W. Va. sheep for a beginning.

J. Sharp Walker formerly of St. Mary's, Kansas, and a spicy writer for the RURAL WORLD on sheep and other

topics is trying to keep cool and avoid sunstrokes in Kansas City. He still owns a star flock of Merino sheep on his Kansas ranch near St. Mary's. When Judge Walker takes recreation from books and clients no cow boy on the range is happier than he is watching his cattle, horses and sheep eat the luxuriant grass.

Some new immense sheep companies are projected, as the little birds tell us, for southern Missouri. We understood them to say \$100,000 in two companies. Undoubtedly the near future of Missouri as a wool growing region is to be unequalled by anything west through so widely famed. The completeness of southern Missouri for homes, ever green pastures, exemption from destructive storms, of snow and hot winds, that destroy as with a besom of destruction all crops and fruits, commend Missouri as a good place to come, and they are coming with families, flocks, means and culture. The RURAL WORLD assures them they will meet with a hearty welcome.

The Merino.

EDITOR RURAL WORLD: Recently I wrote, as best I could, an article for your columns on "What is the best breed of sheep?" The range I gave the question prevented my going into detail as I would have liked, so as to have made myself more fully understood. I answered the question in the most general way possible; and my remarks were applicable only to the average sheep man, not to specialists.

We want the pure, well established breeds, the Merino, Cotswold and South-down, preserved in their purity. In order to do this some must make a business of breeding them for sale as thoroughbreds. Now, of course, some must keep one breed and some another. I don't want all to take to my favorite breed because, first, I want all three preserved; and secondly, I don't want so many to raise my favorite breed that the business becomes unprofitable. Now the two sources of profit from the sheep are wool and mutton. Perhaps no breed or cross is equally valuable for both wool and mutton. No breed can be most valuable in either that is equally valuable in both. Hence, all attempts to invent a breed which shall be the best both for wool and mutton, are vain.

The reasons which determined me to be a "Merino man" are about as follows:

1. It is not too late yet to make wool-growing in Missouri profitable; and the Merino is the breed for wool.
2. There is a vastly greater demand for Merinos than for any other breed, to cross upon other breeds, especially the immense flocks of the west which consist of the "common" or the "Mexican" sheep.
3. The Merinos are hardiest and investment in them is subject to fewest risks.
4. I believe that fine wool is the wool of the future and that, therefore, the demand for Merinos will not die out.

R. W. GENTRY.

Pettis county, Mo.

Sheep Notes.

According to the best information, there are about 4,000,000 sheep in Texas. This will probably be increased 20 per cent during the coming lambing season, bringing the number up to 5,000,000. Valuing them at \$2.50 each would make the total valuation of sheep in Texas \$12,500,000.

A French entomologist asserts that the wool of different countries can be distinguished in market by the beetles which frequent the bales. He has identified forty-seven species in Australian wool; fifty-two in South African wool; thirty in South American wool; sixteen in Spanish wool; and six in Russian wool.

Some idea of the immense flocks of sheep owned by "squatters" in New Zealand, may be inferred in the following, mentioned in a recent government Gazette, published at Canterbury, N. Z.: Robt. Campbell has 386,000 head; Dalzell & Co. 208,000; Geo. Henry Moore 20,000 head; Clifford & Wood 80,000; Mr. Ketchum 80,000; Mr. McLean 50,000; Wm. Robinson 68,000; Sir Dillon Bell 85,000.

The Australians have a very stringent law for the eradication of scab in sheep. They have "State Scab Inspectors," whose business it is to see that the law is enforced. Every sheep owner who discovers indications of scab in his flock is obliged to notify all flock masters within a certain radius, of the fact, and also to post notices in public places. If the disease is not stamped out within 90 days, the diseased animals must be killed. The result has been that scab has almost disappeared from Australian flocks.

Statistical calculations have evolved the fact that the increase in the population of the United States has doubled once in 23 years. It is now about 18,000,000 larger than in 1860, and the natural inference is that in 1890 it will be about 34,000,000. Allowing four pounds of wool to each person, it will require 256,000,000 pounds of wool to meet the requirements of the inhabitants of this country ten years hence. We are now large importers of wool, and yet we have countless acres of good grazing lands as eyes ever looked at, with plenty of water, and climate in almost any section of the country well adapted to the raising of sheep and the cultivation of wool. The growing demands for goods of all kinds of which wool forms the component part, makes it almost compulsory that this branch of industry should be carefully matured. In worsted goods our trade is growing rapidly, and unless we get our supply of wool from our own growers, this trade must leave our shores for the more hospitable ones of England or France, where it is tenderly watched over, as it is an important source of wealth. We could and we should turn the balance of our trade largely in our favor, especially where there is so little cost attached, and the inducements are so great.

Good for Owners of Sheep.

The law in this state to indemnify the owners of sheep in cases of damage committed by dogs—passed in 1879—was amended at the recent session of the legislature in regard to paying out moneys collected as a tax on dogs. The officers charged with the assessment and collection of this tax should be held to strict accountability in the discharge of their duties under the law, and farmers who are interested in this matter should see to it that the provisions of the law in this behalf are rigidly enforced. The amendments recently made to this law are as follows:

Sec. 1. Be it enacted, etc., That section three (3) of an act entitled "An act to indemnify owners of sheep in cases of damage committed by dogs," approved May 29, 1879, in force July 1, 1879, be and the same is hereby amended so as to read as follows:

Sec. 3. It shall be the duty of the county treasurers and supervisors having the custody of the funds collected as license fees, as aforesaid, to pay the same out in the following manner:

First. By such county treasurers to the owners of sheep in their respective counties, and by the supervisors to the owners of sheep in their respective towns, who shall make proof to them before the first Monday in April in each year, a loss or injury to sheep by dogs, other than their own, the full amount of the loss or injury so proved, if there are funds sufficient to pay the same; if there be not sufficient funds to pay such loss or injury, as aforesaid, and making proof thereof in the act provided, shall be paid out of such fund in proportion to his or her loss or injury or his or her pro rata share thereof.

Second. If there should be of such license fund left in the hands of the county treasurer or town supervisor, after paying the losses and injuries sustained as aforesaid, such balance shall be turned into the current county funds, in counties not under township organization, and be appropriated as the county board may direct, and by the supervisor of the town, in counties under township organization, into the general fund of the town, to be disposed of as such town shall see proper.

Sec. 2. Whereas, the money arising from the above tax, is under the law, disbursed on the first Monday of March therefore an emergency exists, and this act shall take effect from and after its passage.—Prairie Farmer.

Causes of Dew.

If dew fell it would fall for the same reason that rain falls; but dew does not fall. It is simply a deposit of moisture always contained in the air to a greater or less degree, and which, when there is enough of it, will always form on any cold body exposed to the moist air, in precisely the same way that a cold bottle or stone, taken from a cold cellar and suddenly exposed in the shade to the moist, warm summer air, will become wet. This is not sweating nor does this moisture come out of the bottle or stone as many people believe, but from the air. It is for the same reason that moisture will condense against the window-panes when the air is cold outside and moist inside, the moisture slowly freezing while its deposits form crystal ice which we so often admire in winter. When the weather is cool enough the moisture will even freeze plants and grass, and then we call it hoar frost; if it does not freeze it is simply dew. The only point left to be explained is why does the ground become so cool during the night, so much cooler than the air above, as to cause the latter to deposit its moisture. This was for many years a vexed problem till Wells first suggested the radiation of obscure heat, which takes place from the surface of the earth through the clear atmosphere into the space above, and so causes the surface to become much cooler than the air itself. He demonstrated this by means of thermometers placed at different heights, and also by the fact that dew is only deposited on cloudless nights. When there are clouds they reflect the heat or prevent it from escaping. The surface of the earth thus being kept from cooling, no dew is deposited.

Compound Oxygen in Epilepsy.

The following is an extract from a letter received from a patient who had used Compound Oxygen for epilepsy. It is dated March, 1879: "I commenced taking the Compound Oxygen last April (1878) for epilepsy, and have taken four months' treatment. It has helped me more than all the medicines I have taken in the last five years. Have only had spasms one time since I commenced taking the Oxygen. I think I am entirely cured of the spasms, and I have not taken the Oxygen regularly for several months, and my health is better in every way than for several years before." Our Treatise on Compound Oxygen, which is sent free, will be found of great value to all who are suffering from any chronic disease. Address DR. STANLEY & PALLEN, 1109 and 1111 Girard Street, Philadelphia, Pa.

Experimenting on the depth at which wheat should be covered, the following results were obtained. Of fifty grains deposited at the depth of eight inches only two came up, and these formed no heads; at seven inches one-fourth came up, but formed no heads. Ten of the fifty came up when covered five inches deep, but had defective heads. At four inches covering there were a few perfect heads, but most were defective. Of those covered three inches all came up; but the best yield was from those covered only two inches deep. The condition of the soil as to moisture was not stated, nor the state of the season, but we should infer it was moist, or those planted three inches would have been better than those at two. The same experimenter says he prefers to cover his wheat only one inch and never more than two.

Worth \$200.

ADRIAN, Mich., April 5, 1880.

Day Kidney Pad Co.: Gentlemen—We are having a very large demand for Day's Kidney Pads. They are giving the best of satisfaction. One of our customers has often told us that he would not take \$200 for the one he has if he could not get another. Many others are expressing themselves in the strongest terms of praise, saying it is the first and only remedy that has ever given them relief or perfect ease. KEEN, BEATCH & SMITH, Druggists.

The Home Circle.

Letter from Paulus.

Friends, for the courtesy you have shown me, I desire to express my grateful thanks. My visits to the Circle, though not frequent, have been of the most pleasurable nature, and for your complimentary words and commendations you have in return my thanks, kind regards and kind wishes.

To Col. Colman especially we owe much. He has devoted a page of his paper to amateur writers, and is thereby performing a laudable educational work. Let all correctly appreciate this kindness in Col. Colman.

To the members with whom I have had harmless little tilts, I wish to say that their remarks were not at all disagreeable to me. I don't mind criticisms much; they generally furnish grounds for some sharp sayings, but add little to the stock of truth.

A member, who came into our midst in disguise, accused me of wearing a mask. He has since pulled his off. It is hard to decide which is more offensive, his mask or his real self. Not being the editor of a daily city paper, nor having the power to look through the shams and tinsel coverings to which poor human nature resorts, I feel a diffidence in suggesting to Don Juan the propriety of his again changing literary clothing. In the words of a very ancient and respectable person, the "acting of an excellent part might insensibly produce a love and real imitation of it." An egotist is not a desirable pattern to copy after, and he rarely commands respect and admiration. Some time ago I wrote a sketch of Don Juan's life, but neglected to forward it to the RURAL. Not much is lost by my withholding it from publication.

One or two of our lady members have caused my bachelor hopes to revive, and now I shall patiently await bissex-tile.

So much has been said about woman's devotion and woman's fickleness that I am puzzled to know if it is fickleness she is so devoted to, and whether fickleness is herself. If it is true that woman's name is fickleness, then I have been a constant devotee to fickleness since arriving at years of discretion. But, dear creatures, as Major Pendennis would say, don't bother your little heads over politics and other demoralizing masculine affairs. Let the men attend to politics and you attend to the men—privately.

Women and men differ mentally and physically. This arrangement is founded in divine wisdom. The Ethiop can not change his skin nor the leopard its spots. The laws governing woman's nature are as immutable. Her thoughts, instincts and aspirations do not run in the same channel as man's. It is a truth that neither man nor woman fulfill the highest destiny singly and alone, and this very truth proves that they are incompetent to perform the peculiar duties pertaining to each respectively. There must somewhere be a line of distinction drawn. It need not be drawn abruptly, like some steep cliff that stops the ocean and says to it: Thus far and no farther shalt thou come. It is wiser, perhaps, to have some common territory for the two sexes—as we have. A place where both can tread and feel that they are not trespassing. It is unnecessary to describe the boundaries of this common territory. Each sex knows its province, and will know how far it may go without infringing on the other. The bounds are set, our nature's attest it, and we cannot outdo nature nor disregard her sovereign voice. If we do, it is at our peril.

Because some of our very intelligent women demand the right of suffrage and all that it implies, would it be a wise measure to give it to them? It is my belief that woman should have most everything she asks for. Indeed, we should anticipate the asking. We cannot sacrifice too much for her, and yet the right of suffrage in woman's hand might cause much evil to society. It might be as a sword in the hands of an unskilled swordsman. On the other hand, there is woman's purity of character and integrity of purpose, which might shield her from the machinations of unscrupulous politicians. Whether the policy of extending the franchise to woman would be wise or unwise, there is another question more forcible than all the rest. Could she exercise the right if she had it? I am not one of those who believe in the superiority of man over woman, but every one knows that woman has ways of doing and saying things peculiar to herself, and in the very nature of things, it is doubtful if she could exercise the right of franchise if she had it. If it were granted her, it might be as the passing storm that sweeps the waters of the ocean far out on the shore. The storm subsiding, the waters would shrink back to their normal confines.

It is very fine to theorize about woman's participating in making laws and executing them. Practically it will not work, and none know it so well as woman. Why, talk about woman's hampered sphere of action, her beggarly rights and few pleasures, would it ameliorate her condition any to give her all the privileges of man—all of his wealth, of freedom and many pleasures? She already has man's virtues without his vices, and as happiness springs from virtue, and the rights and privileges of man do not contribute to a virtuous life, it follows that woman is happier and better without these rights and privileges. Besides every manly man

concedes to woman dearer rights than he arrogates to himself. Woman's empire is love, and—

"What the value of a splendid lot,
Except it's power to prove;
That from the palace to the cot,
The all of life is love?"

If mere physical force is to rule, woman would not be secure in man's rights if she had them. Per contra, if man is manly, woman will never find cause for complaint of hardships. There are, of course, a few of both sexes who consider life a mere game at "club-fist," where the cat gets the bread and cheese and goes to the woods, which are burnt by fire, which is quenched by water, &c.; the finale of which is that any one playing at the game, receives a box and ten pinches, more or less, if he speaks or laughs. There is no sugar plum in life for these people—nothing but pinches—punishments. And they deserve it all. There are fewer women of this class than men. We all know how faithfully and patiently she toils. We know how pure and good she is. We know how she nourishes and cared for us when we were helpless, and how ready she is to minister to our every want. We know she will stand by us when men forsake us, and we know the debt we owe her, and how imperfectly we pay that debt. We know all this, and we bow our heads before her in love and adoration. PAULUS.

Letter from Bon Ami.

Dear Home Circle, I had expected to write you an article to-day on a very important subject, and one which I have been thinking about for a long time, but as this is to be one of the warmest days in July, according to Vennor, I shall postpone my essay to another day. While I have no intention of writing an article I cannot forbear to say a few words about Fifty-Seven's last letter. Fifty-Seven does not do himself justice. This letter is by no means worthy of so good a writer. Generally Fifty-Seven's letters are the perfection of simplicity, but this time I do not see how he could by any species of dreaming, get his ideas so mixed up. I have read his article twice and I cannot get at its meaning. True, the writer says some good things, but I am unable to see any connection between premises and conclusion. He takes nearly a column to state his premises, and by the time he has done so, we are so confused that we cannot see how he gets his conclusion. He tells us that we must take into consideration several things before we can reach a rational conclusion. But I cannot see that scarcely anything he says has anything to do with a correct decision. Self-interest is the motive that induces men to act, and it is the only motive of action, when some men act voluntarily. I take this proposition as granted now; I am going to demonstrate it in a future article. As to whether men are influenced more by the civil or the divine law depends altogether upon the nature of the penalty, and upon men's belief as to the certainty of the infliction of the penalty. Men's belief in the infliction of the penalty for violated law depends partly upon their judgment, and partly upon their education. Most men are more certain of being punished for the violation of the civil law, because the penalty for disobeying divine law comes after death and beyond the experience of mankind. We may be tolerably safe in drawing the line thus: Christians are probably influenced more by the divine law; the rest of mankind by the civil law. But the Christians are a small minority. Besides presenting his premises in a confused manner, the writer indulges in a little step-shod criticism. He tells us the revisers have banished the word "hell" from the New Testament. I presume he has been misled by some of the learned dailies. However this may be, it is certain that he has not read the revised edition, or he had known that such is not true. There are two words in the Greek, both of which were represented by the King James translators by the word "hell." As these words have not the same meaning, our late translators have translated one by "hell" and the other by "hades."

Fifty-Seven sometimes has dreams, and I am inclined to believe that his last letter is one of them. Oh, no! Daisy Dell, I am not an old man. I am just twenty-four, which makes me about middle-aged, does it not? I can scarcely realize that I am this old, for I feel just like a boy. But years come on us before we are aware. When we look back over the last decade of our life, we have not done the half we expected to do. In ten years we expected to be happy, expected to achieve success, but now we are no nearer our ideal success and happiness than ten years ago. But as we so confidently expect happiness we scarcely take time to grieve over the past. We seldom are, but always expect to be blessed. But we ought to remember that the future will be like the past, unless we change our way of living. We ought to live to-day as though it were our last. We must learn to be happy in the present, or we never shall be so.

As regards your remarks on Byron, I am glad you set me right. I am glad you admire only his intellect, and his few really good moral qualities. I am willing one should extend charity to every unfortunate being, but I think it unjust and inconsistent to court the society of such men and women as Byron and Burns, Sara Bernhardt and George Eliot, and be ashamed to meet persons who are like them morally, but who are not so fortunate as to have genius. Myrtle, I think you have written one of the best letters that have appeared in the Circle for a long time. If you continue to write as well, you may believe me among your admirers, even if you do choose to differ from me. I like to see a person who can think for himself—especially a lady.

Write on Herbert in your chosen field. We all like you. Calcium Fleet, do not be afraid of incurring the displeasure of our profound thinkers. Paulus and Enon are absent

and Walnut is engaged on "the signs of the times indicate the downfall of the United States."

BON AMI.

Letter from Albert.

Dear friends, this is a lovely morning for July, and I must step aside from the regular morning's routine incident to country life, and have a talk with you. I only fear I shall prolong my stay beyond the time allotted, and dinner might suffer in consequence or rather those who are dependent on it for their promenading in the hay field this afternoon. However I am warned by the fate of my last epistle that long calls are not desirable, and the visitor not being admitted at all is a something not unknown.

Yes, Lily of the Valley, come in out of the rain and have a seat, I assure you of one attentive listener. Our lives do indeed alternate with clouds and sunshine. One day we are bright and happy, the next sad and cast down by some sorrow, either real or imagined. We find it is not so much in the happy, golden hours of life as in the dark and stormy days that we learn the true depth of his quick love and sympathy.

Walnut and Bon Ami, we are interested in your discussion.

Lloyd Guyot, Cousin Charlie and Black-eyed Vallie, don't let the Circle grow less for want of your assistance. I would like to know what has become of some of our favorites, anyhow? They have been called for so often, and failed to reply, that they certainly cannot be within hearing distance. Are they among us and we do not recognize them in their new names? If so, I think they have worn the mask long enough, and might lay it aside. There is Cristie, Louise M., Ella C., Linie S., and Beaula B., of long ago, as well as a host of other alphabetical friends whom we all loved to see among us. Do they remember it is said "absence conquers love," or do they believe that "separation does but sweeten love, and joy of meeting recompense the pain of parting and of absence?"

Fifty-Seven, if your dreams are all as pleasant as your May dream, please dream us another.

I had the pleasure of an introduction to our friend Shirley at an entertainment given by a mutual friend. She promised a letter to the Circle, soon if possible, and Shirley what has become of the visit you were going to make me? It is not many weeks till the summer will be gone for this year. I shall look for it ere it closes.

I have been reading a little book entitled "The Holy Sabbath." It is Nature, Design and Observance by Rev. James Stacy. It is the prize essay which received the two hundred dollar reward offered by a gentleman in Atlanta, Ga., for the best written work on this subject, and was selected by the committee out of one hundred and eighty others. Any one wishing to procure a copy can do so by sending five cents to the Presbyterian Board of Publication, Richmond, Va. Those now studying up the Sabbath question will find it an interesting work.

Sabbath desecration seems to be growing bolder every year. In our own town as well as in many other towns, Sabbath excursions and picnics are becoming very popular, and are planned for that day by the managers, because they find them so well patronized by the people. Our county papers, edited by Christian (?) men are loud in their praise of them, and strongly urge their readers to attend, promising them a splendid time. They have either not the disposition or the moral courage to speak out against this great evil. Match games of base ball are played on the Sabbath day and witnessed by crowds of people. We, as a nation, as a church and as individuals will be held responsible for violating a positive command of a just and holy God. ALBERTA. Lafayette Co., Mo., July 25th, 1881.

Letter from Daisy Dell.

Lloyd Guyot, you are mistaken. I have no inclination to quit the Home Circle. Don't you see my letter of May 14th, hid away until July 14th. Quite complimentary! My letters are just so good that the editor prefers keeping them for himself a long time. Well—if I am his favorite—I can't help it. Girls, don't be jealous, for jealousy is the meanest vice a woman can possess, and the most dangerous one.

Nina, don't listen to Walnut; let Vin-dex's brains alone, he is Bon Ami's pupil. Little Mite, you shall be informed in due time, but how can you admire Mrs. Southworth? She paints too highly. Her "Deserted Wife" is a thrilling story, but read her "Retribution" and I think your ardor will subside. As a novelist, I admire Mrs. Lee Hentz.

Gipsy Countess, thank you. We all intend doing that very thing, if we can. Fifty-Seven, enjoying the reading of your "dream" exceedingly. Visit dream-land often and give us the benefit of what you see.

Rupert, tell Lily if you are a deserter; I can't tell.

Bon Ami, you and I must "agree to disagree." I think the youths of our country would better read nothing, than trashy literature, and again I do not think cabbages and turnips bad food by any means. I think for various reasons the "first kiss of love" should be reserved until after the matrimonial state is entered into, for engagements—even between the most sincere—are sometimes broken off.

Violet, I expect I shall have to say "I stand corrected." The truth is, I never lived about a house where women had to clean up the spittoon or tobacco chewers. If all the men are so careless, thoughtless, and I might add, beastly, as you represent your tobacco chewers, I pity their wives. I must think though, there are some gentlemen among them, for my father

chewed and smoked, yet, I am sure he left no trace of amber to be cleaned up.

Gertrude, fancy deceived you a little, I am tall and slender, with blue eyes, and regular features, but alas! for the golden hair, which I have so much admired. I am not twenty years old nor do I lay any claims to beauty. Do you live near the old Hale or Duvall farms on the prairie? I know a good many persons in the neighborhood.

Orphan Boy, if I knew your age I might advise more suitably. At any rate, read T. S. Arthur's works, read all of—(will some one remind us of the name of the author of "Prince of the House of David"?—his writings, they are splendid." Read Mason, on Self Knowledge; Lotta's Charm of Sacred Wonders; Marvin's East by the Way of the West; McCabe's Pathways of the Holy Land.

In handling the British poets, don't fail to read Wilson's City of the Plague and The Falcon by Barry Cornwall. I might call your attention to other good books, but perhaps you need a rest. I like good reading matter above all other entertainments, and frequently catch myself saying phaw! when intruded upon by "callers." Of all petty annoyances, the worst company on Sundays, except it be for a little while late in the afternoon, then a pleasant chat with a short stroll is not objectionable. Down here—frequently—a girl's lover will perch up at her house all day." Gillie Lee might tell us something quite amusing in that line. Excuse me, Gillie, I did not mean to tell it.

Twannee, I think I can give you the desired information. When one tires of a correspondence, he encloses an almanac picture, and sends, in lieu of his own, promised. DAISY DELL. July 23d, 1881.

Letter from Quitman.

Schoolmarm, if you still think of coming to south west Missouri, I advise you to give Newton county a trial. There is room enough here for you, and thousands of others. This is a healthy country, well watered, plenty of timber, and land can be had at reasonable prices. Generally speaking, grain, fruit and vegetables grow to perfection; but the present season our crops are not up to the average, owing to the severe winter, wet spring, and the present dry and hot weather. A good teacher can get employment at fair wages. You can live as well and as cheap here as in any State. I answered your question in a former article, but it did not appear.

Nina, you evidently think me a hard-hearted, miserly wretch. If so, you are mistaken, for nothing gives me more real pleasure than to favor a friend when it is in my power to do so; but to stand his security, I would refuse. That friendship which I must buy with dollars and cents, I don't consider is worth having.

Critie, I have often looked over the Home Circle for your name, but have failed to see it. A lady of your talent ought not to desert the Circle. I am thinking of going to the north-west frontier of Texas shortly, where, if some noble redman does not scalp or capture me, I may be heard from in the future. QUITMAN. Newton county, Mo., July 15th.

Letter from Widower.

Here I am again to have a chat with the members of the Home Circle. I have not had an attack of laziness, as Nina and Daisy Dell seem to believe, why! girls, you make me blush talking that way right before the whole Circle. But I must confess that I have a chronic attack of ignorance that often keeps me from writing. And Nina, since I was here last, I have purchased a stove-pipe hat and have given the county clerk a dollar, and—well it won't do to tell everything or perhaps you will not loan me that gun.

Schoolmarm, I live in St. Clair County, which lies just across the river from St. Louis, and is the banner county of the banner State, and is out for all members of the Home Circle, and a warm welcome awaits them within. In looking around over this fine county I see some of those dreaded signs that Walnut has enumerated as foreshadowing our national decline. Here those dreaded Germans constitute the majority of our population, and are among our most wealthy, industrious, peaceable and intelligent citizens. And from my experience with them in different parts of the country I can safely say that their advent is certainly a very poor forecast of an impending downfall. That foreign church is also very numerous represented here, and I would anxiously inquire in what manner do they threaten the stability, perpetuity or the prosperity of the Union? That argument is certainly not worthy of notice, the writer, no doubt has been prejudiced by jealous demagogues that think they are serving the holy cause of Christ by denouncing others, who, perhaps, meddle less in the political affairs of the country than themselves.

Why should certain imperfections in the public affairs of the country be considered as forerunners of impending dissolution? Is there anything perfect under the sun? Are we any worse than other nations, or at any previous period? If we are on the wrong track, experience of our own and that of others, will teach us a remedy, when we will again continue our career onward and upward. We are too prone to compare our present social and political States with the same of certain nations of antiquity, the world, the times, and the people have changed, and a more general diffusion of knowledge, combined with a superior civilization will enable us to see clear of those causes that brought about the downfall of those nations. Still there is an end to all things, and there will be an end to the prosperity and the national importance of this great republic. But that will not be effected by any of the trivial causes enumerated by Walnut, and that end is

not yet foreshadowed, and when it comes will, in all probability, have been brought about by its going to pieces by its own weight, by the growing effeminacy, and the luxurious living of our people. Intemperance affects its victim to a far greater extent than it does the State which receives large revenues from it, and immense business and commercial enterprises are thereby created. And I would ask is it any worse than at any previous period, and are not the people of this country taking steps for its abolishment? We as a nation, like all the rest, are not without fault, but so long as the people of the United States retain their present love for their country, their present respect and obedience to its laws, their present thrift and enterprise, and maintain that ever growing eminence of the arts, science and literature, their general repugnance to fraud and corruption, in public and private, that characterizes them at present, the most far-seeing must fail to see those alarming indications of a coming downfall. WIDOWER.

Letter from Kansas.

COL. COLMAN: I have been a reader of your valuable paper for a long time, and have perused the Home Circle with pleasure and profit. I now for the first time send in my card, and if accepted, I hope to become a member of the Circle. My husband is a regular subscriber to some ten papers, and several of them have the Home Circle, or Women's Department, but none are more interesting than that Women's Department in the RURAL WORLD.

I have been a resident of north central Kansas for many years. We have a beautiful country, but at this time, we are having it extremely hot and dry—the mercury ranging from 75 to 107 degrees in the shade, and if it does not rain soon, the crops will be injured. We have had six good corn crops in this county in succession, but the chinch bugs have increased to an alarming extent, having in a manner made it almost impossible to raise wheat.

I would be glad to know how the farmer's wives and daughters are getting along, raising and handling poultry? I now have 400 chickens, including old and young. I have 340 spring chickens, and all seem to be doing finely. In former years I lost heavily from chicken cholera—last year I lost 100 laying hens from cholera. Had I then been in possession of the remedy I have now, I could have cured my hens, as I believe I have found a specific for that dreaded disease with chickens; and if any of the readers of the RURAL WORLD want the remedy, they can have the same by sending stamps for reply, and then report results through the RURAL WORLD.

I am making butter from five cows that are about an average of the cows of the country, and the groceryman tell me mine is the best grade of butter. I sell about ten pounds per week, besides what we use in our family, and we have seven in family. My eggs bring me in as much revenue as the butter from five cows, and there is at least ten times as much labor in making butter as required with my chickens.

Now, as this may not be of sufficient interest to warrant its publication, I will stop; and if this goes to the basket that is kept by all journalists, I will not apply again, but expect to continue to take the RURAL WORLD, so long as we can raise the funds for the subscription price—that is, if it continues in the future as it has in the past, to do battle for the farmers and laborers of the whole country.

Will Daisy Dell please send me her address, as I am quite anxious to learn all about the particular part of the State she lives in? MRS. W. H. ANDERSON. Concordia, Kas.

Letter from Enon.

DEAR RURAL: A certain confident Napoleon air with which some writers make statements incapable of proof, and educe arguments whose premises do not, when admitted, bear any practical relation to the conclusion, is misleading to that class of readers which does not pause to question or investigate. Let us examine, in the light of logic and facts, a recent writer's article on "the downfall of the United States."

The writer informs us, very confidently, that Greece "became an easy prey to the Romans," and that both she and her conqueror "fell because of their corruption in mind and heart of their citizens." A man of over fifty years' duration was not an excessively "easy" subjugation, when we reflect that the different republics and kingdoms, known collectively as Hellas, rendered one another little or no assistance in the struggle against a common enemy. After reading of the civil strife in Greece just before her overthrow, and the long struggle made under such a crushing difficulty as civil strife always is, it will become obvious to any mind that had she been united then as she was once on the plain of Marathon, a single Roman standard would never have been flung to the breeze on the Acropolis at Athens.

Rome fell not so much because her citizens were "corrupt in mind and heart," as because she had grasped more than she could retain. Had she remained a republic and retained her unchanged policy of perpetual aggrandizement, she would, in all probability, have lost a national life sooner than she did. Despotism cannot be supposed to exist in a republic, and all history, all reason, tell us despots are the first requisites of a conquering race, which shall extend its dominion over as vast an area as did the Romans.

Admitting drunkenness, Sabbath desecration, trashy literature, etc., to be prominent features of our social status,

let me state what are, in my opinion, very stubborn facts, and draw conclusions from these facts:

1. Greece fell because of disunion. Our nation is united and therefore cannot fall from that cause.

2. Rome fell because of her "first, last and all the time" national character. We have no such character, and therefore will not fall because of our attitude toward nations.

3. Drunkenness, etc., are as much practiced in other countries as here; therefore, no nation will be able in these respects to effect our conquest than we will be to effectually defend ourselves.

It may be objected to paragraph No. 1, that corruption was the cause of disunion in Greece. Suppose, then, it to have been the cause of disunion during our late civil war. Did not the logic of events prove union to have been, at that time, stronger than both corruption and disunion? And is not sixteen years a short period for the growth of a second cancer deadly enough to destroy the national body? Our opposing political parties are widely separated as to political tenets and beliefs, but they coalesce in so far as belief in our country's peaceful destiny is concerned. Ascertaining that Germans are a corrupting class of immigrants is not proving it. All unprejudiced people will admit Germans to be one of the best elements of our population. Who are more thrifty, more progressive and intelligent than they? What would science be without the results of German research? What would the fine arts be without the labors of German masters? I answer that both science and art would be sadly deficient. And the American people would lose many of their best characteristics, were all the sturdy German blood, which courses through their veins, withdrawn.

Let us now look at "the occupant of the beer garden," in regard to his "desecration of the Sabbath"—not, indeed, that said profanation of holy things would be a factor in causing this tremendous downfall, but as regards the occupant's right to desecrate (?) Sunday, if he so chooses. In the first place, Sabbath and Sunday are not synonymous. Sunday is the first, the Sabbath is the last day of the week. The constitution recognizes no rest-day or other institution of any religion whatever. Contrarily, the constitution says, "Congress shall pass no law respecting the establishment of a religion." Therefore, all local laws, forcing to draw a long face and stay at home on Sundays, are null and void, because they violate a provision of the supreme law. People should rest one day of the week, and those who are Christians should take sacrament on Sunday, but all can rest as well in innocent recreation as otherwise.

Favoring protective tariff and opposing monopoly are certainly very contradictory courses of procedure. Foreign manufacturers are debarred from selling us cheap goods, and home manufacturers (who can be fat at a small fraction of any people) are enabled to pile up their profits of 400 and 500 per cent. If doing this is not monopoly, there is no such thing as monopoly. I shall rest my argument here on something more than mere windy assertion is brought forward by my opponent.

Don Juan, the only "uncontrollable applause," which greeted the throwing off of your mask, were some gushing remarks from Myrtle.

I agree with Nina that Vamme should come again.

Thanks for your kind remarks, Lloyd Guyot. Let us see the Circle complete every week. ENON.

Pike county, Mo.

Letter from Lily of the Valley.

Though we all cannot write something brilliant we can cultivate our little talent and perhaps it will expand and some little word may fall on a weary heart like a rain drop on a perishing flower reviving it. If we all cannot write we can weave the bright threads of joy and gladness into some lives by a kind word, smile or helping hand. How often the day has been brightened for us by loving words whose echo will be heard in the years to come.

But the opportunities we let pass because of our selfishness. Sisters it seems a little thing to ever meet our brothers with a smile, be ever ready to humor them in anything that is not really wrong, let them see we are ready to give up our pleasure to contribute to their happiness; our influence will be great if they are sure of our sympathy in all their crosses; and if we can only keep them from the bar-room, card table and their evil associations will we not be well paid. If we can only live lives so pure and noble that others may follow in our foot steps and then reach that heavenly shore will it not be a bright garland to place on our tombs; an influence that will be felt for good after our hands are folded in death's icy clasp.

Dear readers I feel called upon to defend myself for the appearance of my last letter; you all will vote me a medal for spelling, I am sure after Mr. Typo corrects me, I really think it quite an improvement to put a d in the place of c in picture and he surely was sleepy to put Slim-roost for Slim mons; but if my readers will credit him with all such improvement, I will excuse him, and for I tried to set some type once, and thought I would have to borrow papa's spectacles to magnify the letters.

Garland it was a pleasant surprise to see a few lines from you, and you were wise to withhold that cue for I might have accompanied that dog and taken advantage of Sal Baxter's leap year boom and I would have a gun too; so Nina would not be lonesome. That friend went to the state of happiness I guess from the length of time he stays, or forgetfulness he has forgotten me. Will you tell me if you are tolerably tall and spare with brown eyes and fair hair?

Black-Eyed Vallie you ask the sisters to be lenient with the boys; that we have faults too (granted). Now will you tell me who is most to blame for

send free to his fellow sufferers. Address
45-52 J H REEVES 43 Chatham st., N. Y
